					ST DEPARTMENT DIVISION C		TURAL RES				AMENI	FC DED REPOI	RM 3	
		AF	PLICATION I	OR F	PERMIT TO DRILL					1. WELL NAME and N	JMBER NBU 102	2-3C1BS		
2. TYPE O	F WORK	DRILL NEW WELL	REENTE	R P&A	WELL DEEPEN	WELL	3. FIELD OR WILDCAT NATURAL BUTTES							
4. TYPE O	F WELL	G			ed Methane Well: NO					5. UNIT or COMMUNI	FIZATION NATURAL		ENT NAM	1E
6. NAME C	F OPERATOR			AS ONSHORE, L.P.				7. OPERATOR PHONE						
8. ADDRES	SS OF OPERATO	OR		enver, CO, 80217				9. OPERATOR E-MAIL	-	anadarko	com			
10. MINER	BER			_	12. SURFACE OWNER	SHIP		_						
UTU-01191 FEDERAL INDIAN STATE 13. NAME OF SURFACE OWNER (if box 12 = 'fee')										FEDERAL INI	DIAN [(if box 12		EE(_)
											`			
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')											C-WIAIL	(II DOX 12	:= iee)	
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') 18. INTEND TO COMMINGLE PRODUCTION FR MULTIPLE FORMATIONS									_	19. SLANT		_		
				YES (Submit C	Commingl	ling Applicati	on) NO [2	VERTICAL DIF	RECTION	AL (III) H	HORIZON	TAL ()	
20. LOCA	TION OF WELL			FOO	OTAGES	QTI	R-QTR	SECT	ION	TOWNSHIP	R/	ANGE	ME	RIDIAN
LOCATIO	N AT SURFACE		81	0 FNL	. 1682 FWL	NI	ENW	3		10.0 S	2:	2.0 E		S
Top of U	ppermost Prod	ucing Zone	16	6 FNL	. 2110 FWL	NI	ENW	3		10.0 S	2:	2.0 E		S
At Total			16		. 2110 FWL		ENW	3	10.0 S		22.0 E			S
21. COUN	TY	UINTAH			22. DISTANCE TO NEA	REST LE 16		eet)		23. NUMBER OF ACRI	10		IT	
					25. DISTANCE TO NEA (Applied For Drilling		leted)	POOL		26. PROPOSED DEPTI		TVD: 893	13	
27. ELEV	TION - GROUN	D LEVEL 5072			28. BOND NUMBER	WYB00	00291			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8496				LE
					Hole, Casing	, and C	ement Info	rmation						
String	Hole Size	Casing Size	Length	Wei	_							Weight		
Surf	11	8.625	0 - 2400	28	3.0 J-55 LT8	&C	0.2	2		Type V Class G		180 270	1.15	15.8 15.8
Prod	7.875	4.5	0 - 9048	11	1.6 I-80 LT	&C	12.	5	Pren	nium Lite High Strer	ngth	300	3.38	12.0
										50/50 Poz		1230	1.31	14.3
					А	TTACH	MENTS							
	VER	IFY THE FOLLO	WING ARE A	TTAC	HED IN ACCORDAN	ICE WIT	TH THE UT	AH OIL AN	ID GAS	CONSERVATION G	ENERA	L RULES		
w w	ELL PLAT OR M	AP PREPARED BY I	LICENSED SUR	/EYOR	R OR ENGINEER		СОМ	PLETE DRII	LLING PI	LAN				
AF	FIDAVIT OF STA		FORM	1 5. IF OPER	RATOR I	S OTHER THAN THE LE	EASE OW	NER						
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)									L MAP					
NAME Gi	AME Gina Becker TITLE Regulatory Analyst II PHONE 720 929-6086													
SIGNATU	GNATURE DATE 07/05/2012 EMAIL gina.becker@anadarko.com													
	BER ASSIGNED 047529240	0000		4	APPROVAL				Bro	ocylll				
										nit Manager				

NBU 1022-3C Pad Drilling Program
1 of 7

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-3C1BS

Surface: 810 FNL / 1682 FWL NENW BHL: 166 FNL / 2110 FWL NENW

Section 3 T10S R22E

Uintah County, Utah Mineral Lease: UTU-01191

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. <u>Estimated Tops of Important Geologic Markers</u>: <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta Green River Birds Nest Mahogany Wasatch Mesaverde Sego	0 - Surface 1,153' 1,474' 1,945' 4,354' 6,715' 8,933'	Water Water Gas Gas Gas
TVD	8,933'	
TD	9,048'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program

6. <u>Evaluation Program</u>:

Please refer to the attached Drilling Program

NBU 1022-3C Pad Drilling Program 2 of 7

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 8933' TVD, approximately equals 5,717 psi (0.64 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,739 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Drilling Program. Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

NBU 1022-3C Pad Drilling Program
3 of 7

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

NBU 1022-3C Pad Drilling Program
4 of 7

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

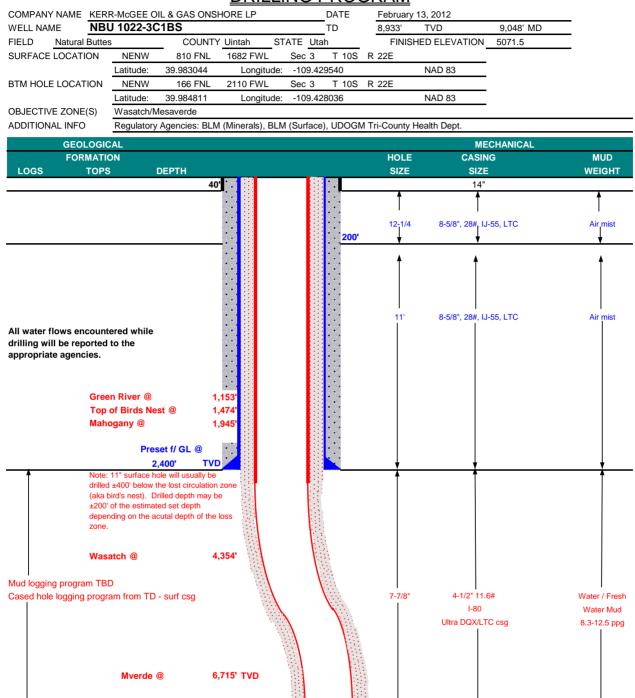
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. <u>Other Information:</u>

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM



8,933' TVD

8.933' TVD

9,048' MD

Sego @

TD @

Max anticipated

12.5 ppg

Mud required

RECEIVED: July 05, 2012



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM	<u>//</u>								DESIGN	FACTORS	
										LTC	DQX
	SIZE	INTE	RVAL		WT.	GR.	CPLG.	BURST	COLL	APSE	TENSION
CONDUCTOR	14"	0-	-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,400	28.00	IJ-55	LTC	2.25	1.67	5.91	N/A
								7,780	6,350	223,000	267,000
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	1.09		3.14
	4-1/2"	5,000	to	9,048'	11.60	I-80	LTC	1.11	1.09	5.87	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1		+ 0.25 pps flocele				
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
		+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water	to surface,	option 2 wi	ll be utilized	
Option 2 LEAD	1,900'	65/35 Poz + 6% Gel + 10 pps gilsonite	180	35%	11.00	3.82
		+ 0.25 pps Flocele + 3% salt BWOW				
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
		+ 0.25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION LEAD	3,848'	Premium Lite II +0.25 pps	300	35%	12.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	5,200'	50/50 Poz/G + 10% salt + 2% gel	1,230	35%	14.30	1.31
		+ 0.1% R-3				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE Guide

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveye	will ha	takan	at	1 000'	minimum	intanyale	
oui veys	WIII DE	lakell	aι	1,000	IIIII III III III III III	iiileivais.	

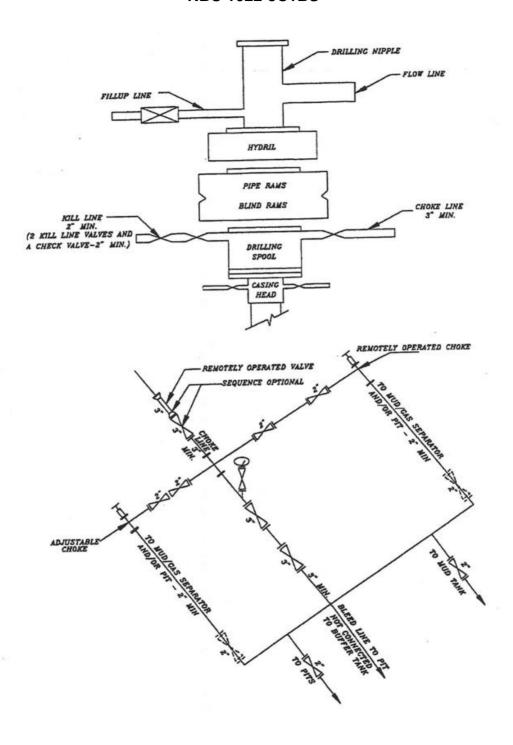
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:		DATE:	
	Nick Spence / Danny Showers / Chad Loesel	<u> </u>	
DRILLING SUPERINTENDENT:		DATE:	

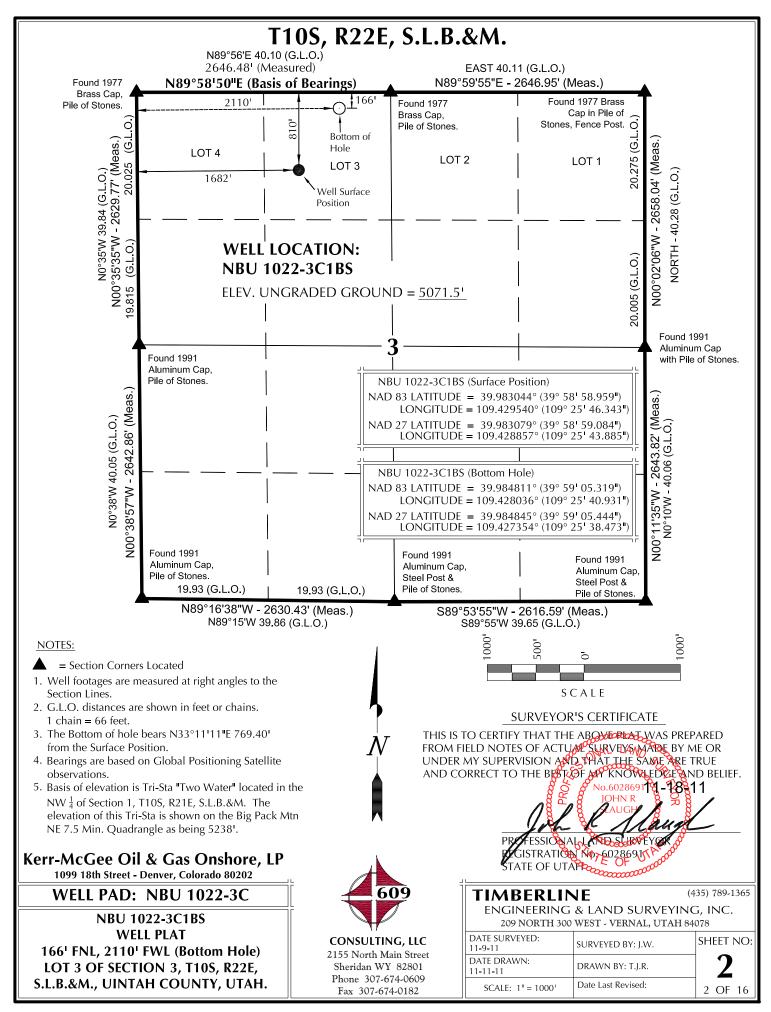
Kenny Gathings / Lovel Young

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

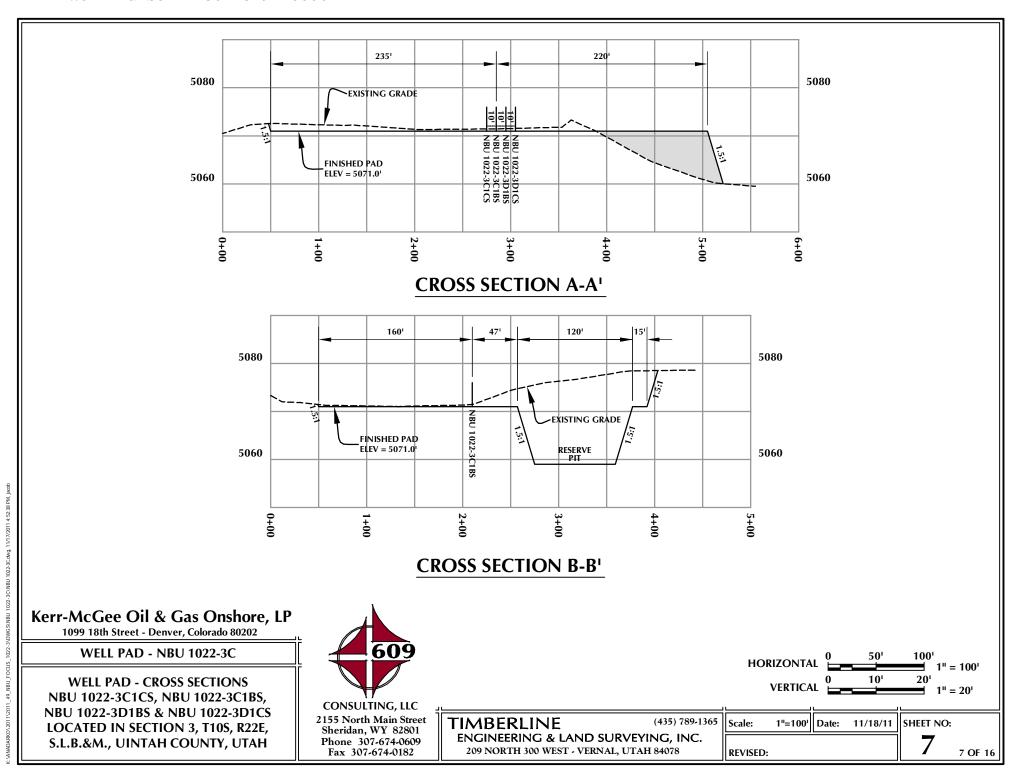
EXHIBIT A NBU 1022-3C1BS

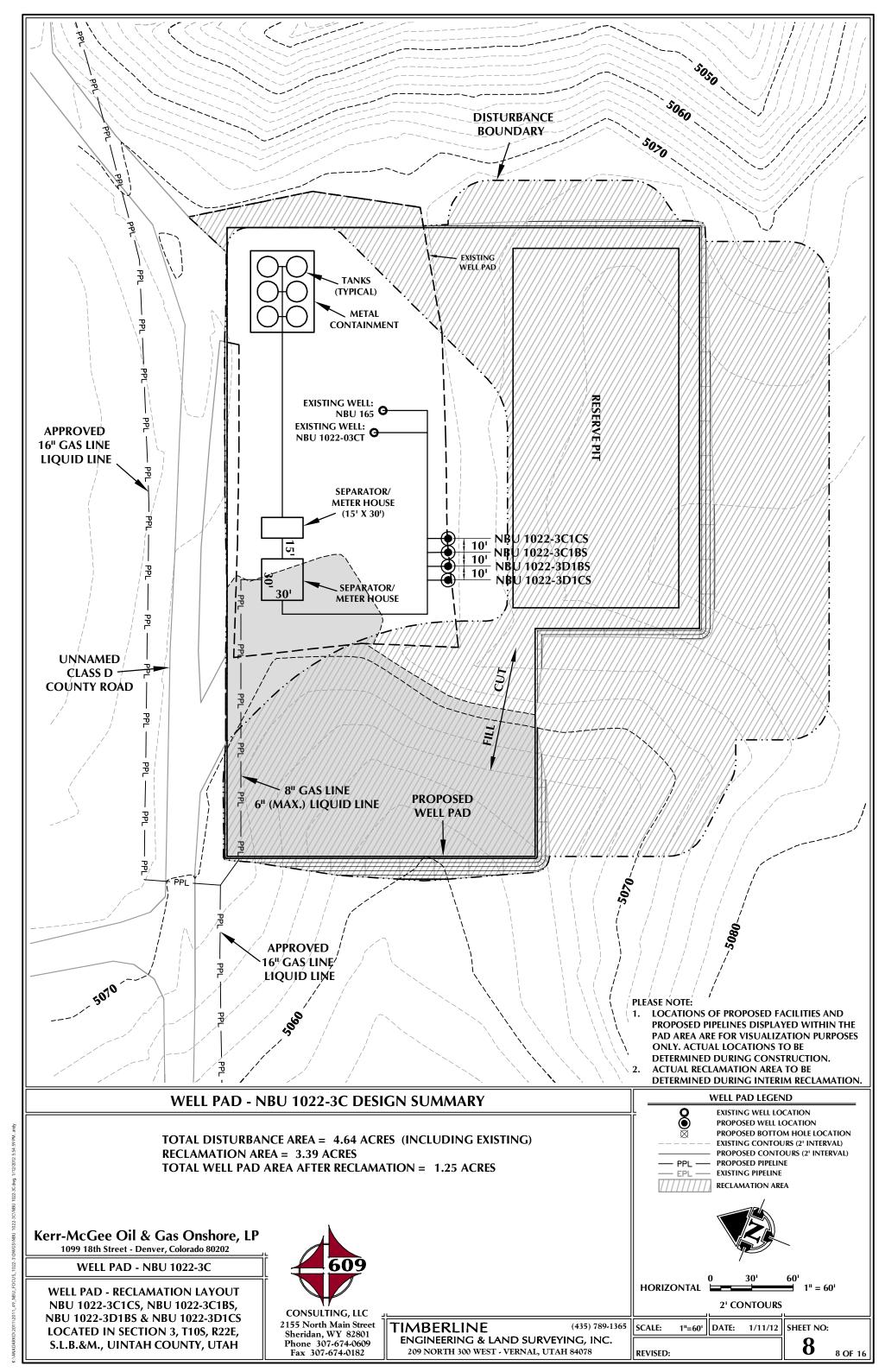


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



			RFACE POSITIO			BOTTOM HOLE						
WELL NAME	NAC LATITUDE	083 LONGITUDE	NAC LATITUDE	D27 LONGITUDE	FOOTAGES	NAC LATITUDE	083 LONGITUDE	NAI LATITUDE	LONGITUDE	FOOTAGES		
NBU	39°58'58.996"	109°25'46.224"	39°58'59.121"	109°25'43.766"	806' FNL	39°59'00.844"	109°25'40.616"	39°59'00.968"		619' FNL		
1022-3C1CS NBU	39.983054° 39°58'58.959"	109.429507°	39.983089°	109.428824°	16921 FWL	39.983568°	109.427949°	39.983602°	109.427266°	2130' FWL 166' FNL		
NBU 1022-3C1BS	39°58'58.959" 39.983044°	109°25'46.343" 109.429540°	39°58°59.084° 39.983079°	109°25'43.885" 109.428857°	810' FNL 1682' FWL	39°59'05.319" 39.984811°	109°25'40.931" 109.428036°	39°59'05.444" 39.984845°	109°25'38.473" 109.427354°	2110' FWL		
NBU 1022-3D1BS	39°58'58.922" 39.983034°	109°25'46.462"	39°58'59.047" 39.983069°	109°25'44.004"	813' FNL	39°59'04.747" 39.984652°	109°25'57.326"	39°59'04.871" 39.984686°	109°25'54.867"	224' FNL 833' FWL		
NBU 1022-3D1CS	39°58'58.885" 39.983024°	109.429573° 109°25'46.581" 109.429606°	39°58'59.010" 39.983058°	109.428890° 109°25'44.123" 109.428923°	1673' FWL 817' FNL 1664' FWL	39°59'01.220" 39.983672°	109.432590° 109°25'57.370" 109.432603°	39°59'01.344" 39.983707°	109.431908° 109°25'54.911" 109.431920°			
NBU	39°58'59.771"	109°25'45.569"	39°58'59.895"	109°25'43.112"	728' FNL	33.303072	109.432003	33.303707	109.431920	020 1 1 1 1		
1022-03CT NBU 165	39.983270° 39°58'59.772"	109.429325° 109°25'45.349"		109.428642° 109°25'42.891"	1743' FWL 728' FNL							
1100 100	39.983270°	109.429264°	39.983304° RELATIVE (109.428581° COORDINATES	1760' FWL From Surface	Position to Botto	om Hole					
WELL NAME NBU	NORTH	EAST WE		ORTH EAS	T WELL	NAME NOR	TH EAST	WELL NAM	IE NORTH	EAST		
1022-3C1CS	643.9'	471 1 11	2-3C1BS 18	7.2' 436.5	1022.3	589.		1022-3D1C	s 236.0°	-840.1'		
	100		55.08.304.8 0 80tom Hole 085.68917° 0872.61	BASIS OF BEA OF THE NW: S.L.B.&M. WI GLOBAL POS OBSERVATIO	ARINGS IS TO	HE NORTH LII ON 3, T10S, R2 JEN FROM GATELLITE R N89°58'50"E	NE 11E, 00 / 10 / 10 / 10 / 10 / 10 / 10 / 10	SINC WELL. WE	30 102.105 30 102.105 31 108.105 31 108	74.98' Tole)		
WELL WELLS - NE NBU 10	8th Street - Del L PAD - N PAD INTE BU 1022-3C1 122-3D1BS &	A Gas Ons nver, Colorado NBU 1022 RFERENCE ICS, NBU 10 A NBU 1022- ON 3, T10S,	-3C PLAT 122-3C1BS, 3D1CS,	2155 No Sherida	JITING, ILL orth Main Stre an WY 82801 307-674-060	C DATE 11-9-DATE 11-11-11-11-11-11-11-11-11-11-11-11-11-	MBERL ENGINEERIN 209 NORTH: E SURVEYED: 11 E DRAWN:	INE IG & LAND	SURVEYINC RNAL, UTAH 840 SY: J.W.			





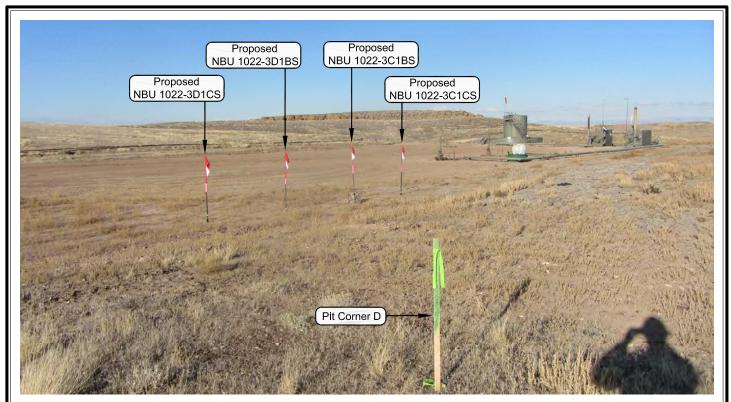


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE





PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: SOUTHEASTERLY

Kerr-McGee Oil & Gas Onshore, LP

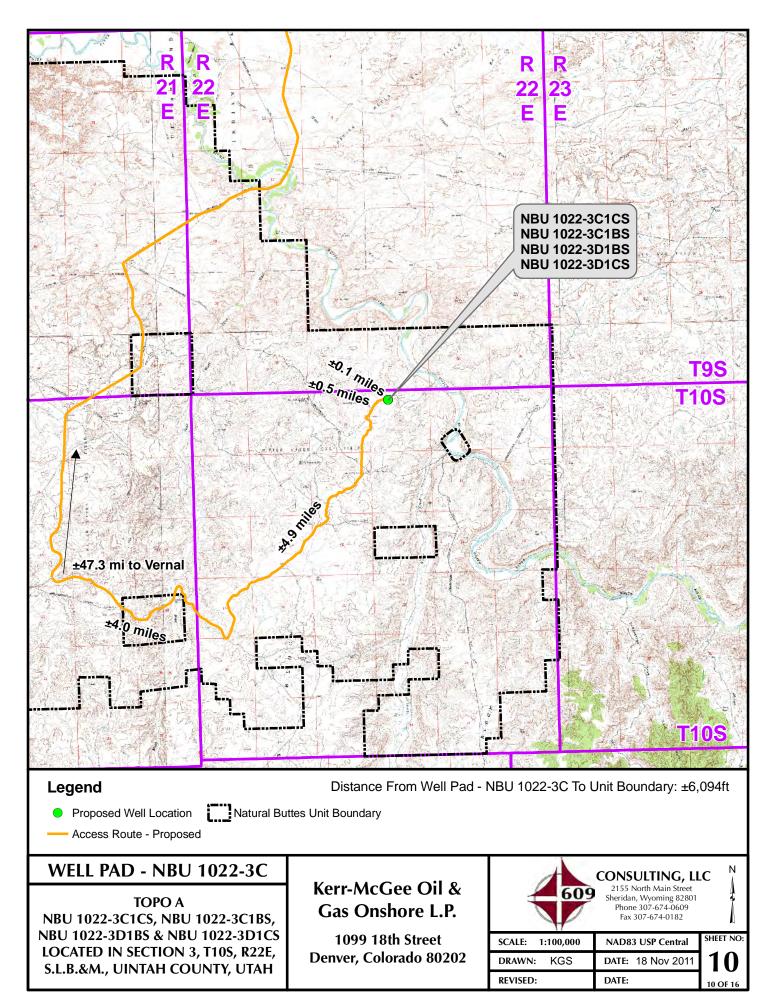
WELL PAD - NBU 1022-3C

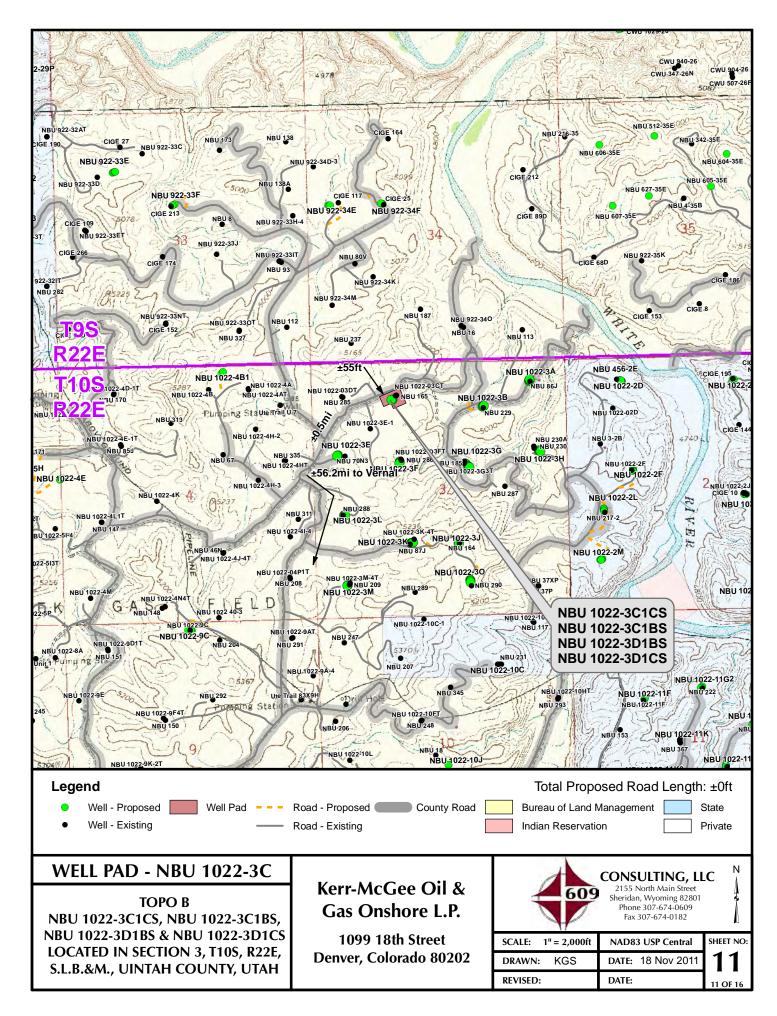
LOCATION PHOTOS
NBU 1022-3C1CS, NBU 1022-3C1BS,
NBU 1022-3D1BS & NBU 1022-3D1CS
LOCATED IN SECTION 3, T10S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.

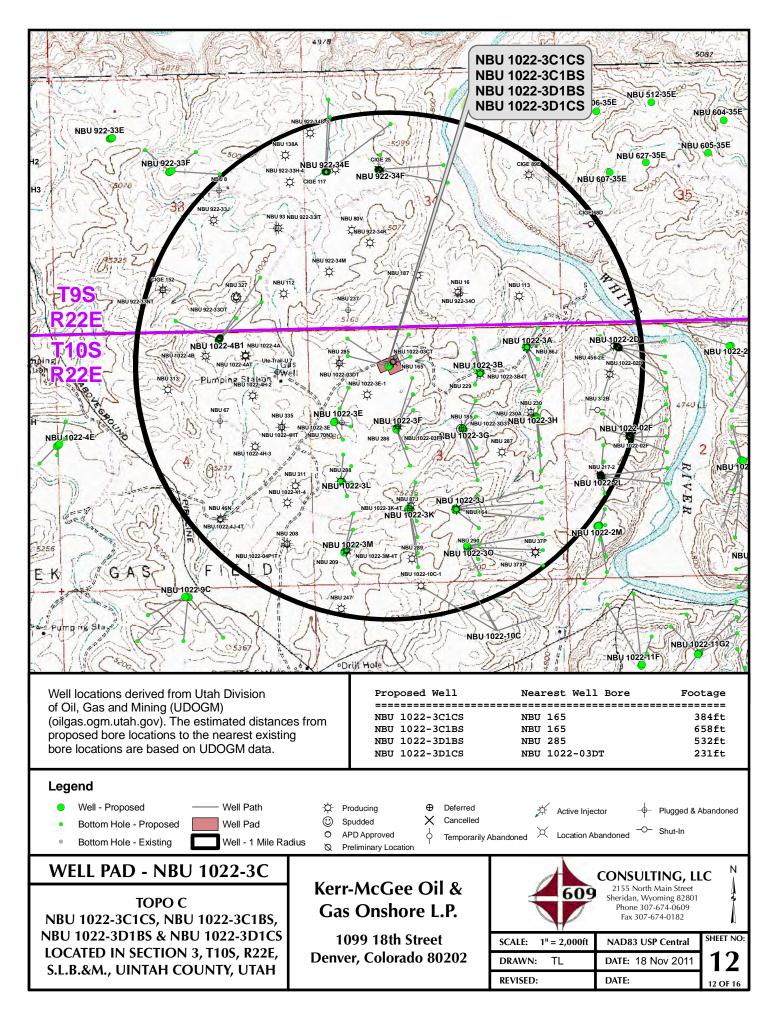


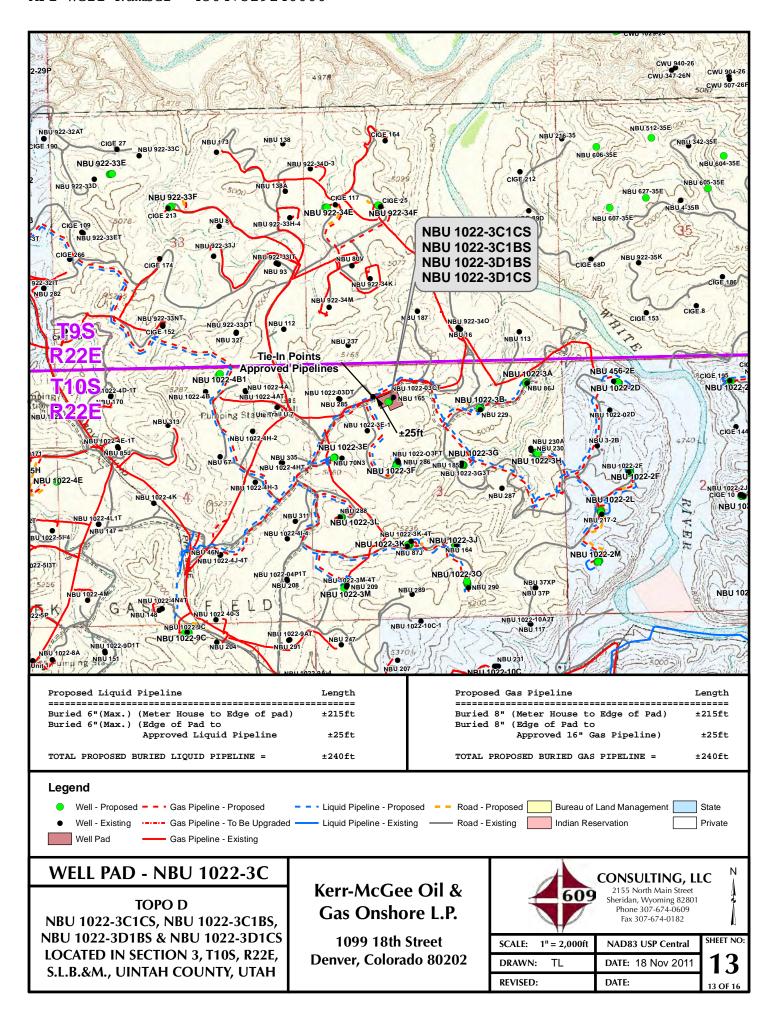
CONSULTING, LLC 2155 North Main Street Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

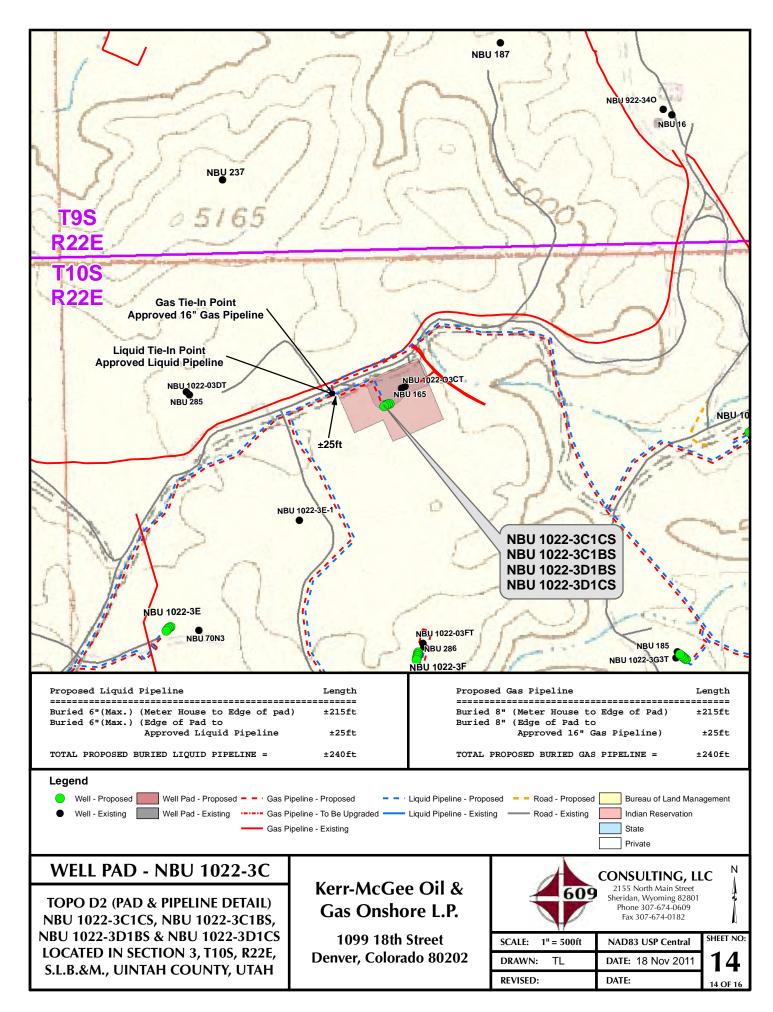
TIMBERLIN	JE (4	135) 789-1365
	& LAND SURVEYING WEST - VERNAL, UTAH 84	*
DATE PHOTOS TAKEN: 11-9-11	PHOTOS TAKEN BY: J.W.	SHEET NO:
DATE DRAWN: 11-11-11	DRAWN BY: T.J.R.	9
Date Last Revised:		9 OF 16

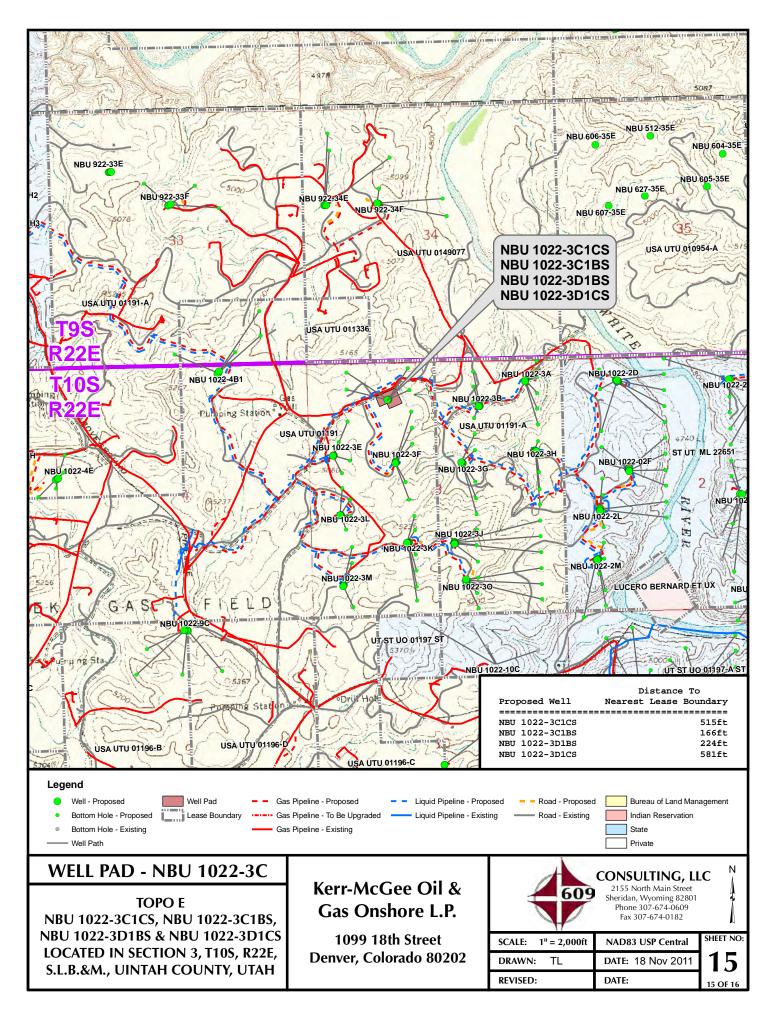












Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 1022-3C WELLS - NBU 1022-3C1CS, NBU 1022-3C1BS, NBU 1022-3D1BS & NBU 1022-3D1CS Section 3, T10S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 23.8 miles to the intersection of the Bitter Creek Road (County B Road 4120). Exit left and proceed in a southeasterly direction along the Bitter Creek Road approximately 4.0 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 4.9 miles to a second Class D County Road to the northeast. Exit right and proceed in a northeasterly direction along the second Class D County Road approximately 0.5 miles to a service road to the southeast. Exit right and proceed in a southeasterly direction along the service road approximately 55 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 56.7 miles in a southerly direction.

SHEET 16 OF 16

API Well Number: 43047 520 Pe24 OUTAB - UTM (feet), NAD27, Zone 12N

Scientific Drilling

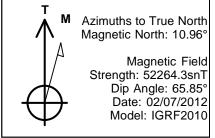
Rocky Mountain Operations

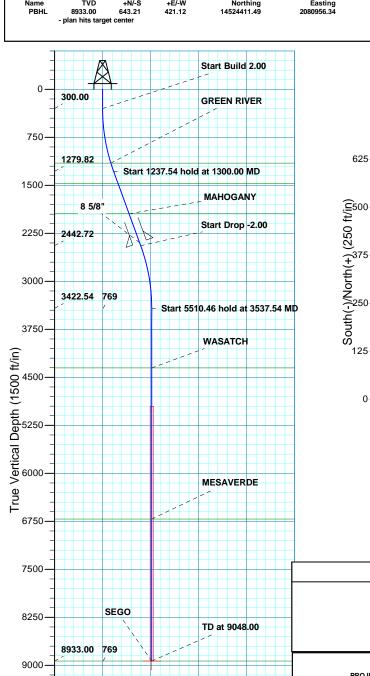
Site: NBU 1022-3C PAD Well: NBU 1022-3C1BS

Wellbore: OH
Design: PLAN #1



WELL DETAILS: NBU 1022-3C1BS GL 5071 & KB 4 @ 5075.00ft (ASSUMED) +N/-S 0.00 Easting 2080546.63 Latittude 39.983079 Northing 14523760.97 Longitude -109.428857 DESIGN TARGET DETAILS TVD 8933.00 +N/-S 643.21 +E/-W 421.12 Northing 14524411.49 Easting 2080956.34 Latitude 39.984845 Longitude Shape -109.427354 Circle (Radius: 25.00 Name PBHL





9750

10500

11250

-750

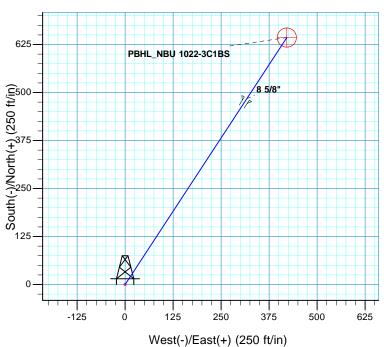
750

1500

Vertical Section at 33.21° (1500 ft/in)

2250

3000



MD 0.00 300.00 1300.00 2537.54 3537.54 9048.00		33.21 0.00	TVD 0.00 300.00 1279.82 2442.72 3422.54 8933.00	+N/-S 0.00 0.00 144.54 498.66 643.21 643.21	+E/-W 0.00 0.00 94.63 326.48 421.12 421.12	0.0 0.0 2.0 0.0	0 10 10 3 10 18	Face 0.00 0.00 33.21 0.00 30.00 0.00	VSect 0.00 0.00 172.77 596.03 768.80 768.80	Target PBHL_NBU	1022-3C1BS	
PROJECT DETAILS:	UTAH - U	JTM (fee	et). NAD27	7. Zone 12N	1		T)//	DPath	FORM	MATION TOP	DETAILS Formation	
Geodetic System: Univers Datum: NAD 19 Ellipsoid: Clarke 1 Zone: Zone Location: SECTIO	PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N Geodetic System: Universal Transverse Mercator (US Survey Feet) Datum: NAD 1927 (NADCON CONUS) Ellipsoid: Clarke 1866 Zone: Zone 12N (114 W to 108 W) Location: SECTION 3 T10S R22E System Datum: Mean Sea Level										GREEN RIVER BIRDSNEST MAHOGANY WASATCH MESAVERDE SEGO	
				CASI	ng deta	ILS						
			TVD 2395.00	2486	MD 5.75			Size 8.625	·			
1												

SECTION DETAILS

Plan: PLAN #1 (NBU 1022-3C1BS/OH)

RECEIV Created By: Gabe Kendall Date: 16:14, February 07 2012



US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N NBU 1022-3C PAD NBU 1022-3C1BS

OH

Plan: PLAN #1

Standard Planning Report

07 February, 2012



RECEIVED: July 05, 2012



SDIPlanning Report



Database: EDM 5000.1 Single User Db

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-3C PAD

 Well:
 NBU 1022-3C1BS

 Wallborn:
 OH

Wellbore: OH
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-3C1BS

GL 5071 & KB 4 @ 5075.00ft (ASSUMED) GL 5071 & KB 4 @ 5075.00ft (ASSUMED)

True

Minimum Curvature

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System: Universal Transverse Mercator (US Survey Feet)

Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: Zone 12N (114 W to 108 W)

Mean Sea Level

Site NBU 1022-3C PAD, SECTION 3 T10S R22E

Northing: 14,523,764.78 usft Site Position: Latitude: 39.983089 From: Lat/Long Easting: 2,080,555.81 usft Longitude: -109.428824 **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 1.01 13.200 in

System Datum:

Well NBU 1022-3C1BS, 810 FNL 1682 FWL

 Well Position
 +N/-S
 -3.64 ft
 Northing:
 14,523,760.97 usft
 Latitude:
 39.983079

 +E/-W
 -9.25 ft
 Easting:
 2,080,546.63 usft
 Longitude:
 -109.428857

Position Uncertainty0.00 ftWellhead Elevation:Ground Level:5,071.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) IGRF2010 02/07/12 10.96 65.85 52.264

PLAN #1 Design **Audit Notes:** Version: Phase: PLAN Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 33.21

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	33.21	1,279.82	144.54	94.63	2.00	2.00	0.00	33.21	
2,537.54	20.00	33.21	2,442.72	498.66	326.48	0.00	0.00	0.00	0.00	
3,537.54	0.00	0.00	3,422.54	643.21	421.12	2.00	-2.00	0.00	180.00	
9,048.00	0.00	0.00	8,933.00	643.21	421.12	0.00	0.00	0.00	0.00 PE	3HL_NBU 1022-3C



SDI Planning Report



EDM 5000.1 Single User Db Database: Company: Project:

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-3C PAD Site: Well: NBU 1022-3C1BS

Wellbore: ОН Design PLAN #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 1022-3C1BS

GL 5071 & KB 4 @ 5075.00ft (ASSUMED) GL 5071 & KB 4 @ 5075.00ft (ASSUMED)

True

Minimum Curvature

Design:		PLAN #1								
Planne	d Survey									
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
	Start Build 2. 400.00	2.00	33.21	399.98	1.46	0.96	1.75	2.00	2.00	0.00
	500.00	4.00	33.21	499.84	5.84	3.82	6.98	2.00	2.00	0.00
	600.00	6.00	33.21	599.45	13.13	8.60	15.69	2.00	2.00	0.00
	700.00	8.00	33.21	698.70	23.33	15.27	27.88	2.00	2.00	0.00
	800.00	10.00	33.21	797.47	36.41	23.84	43.52	2.00	2.00	0.00
	900.00	12.00	33.21	895.62	52.38	34.29	62.60	2.00	2.00	0.00
	1,000.00	14.00	33.21	993.06	71.19	46.61	85.10	2.00	2.00	0.00
	1,100.00	16.00	33.21	1,089.64	92.85	60.79	110.98	2.00	2.00	0.00
	1,166.14	17.32	33.21	1,153.00	108.71	71.17	129.94	2.00	2.00	0.00
	1,200.00	18.00	33.21	1,185.27	117.31	76.80	140.21	2.00	2.00	0.00
	1,300.00	20.00	33.21	1,279.82	144.54	94.63	172.77	2.00	2.00	0.00
		hold at 1300.00		4.070.70	470.40	440.07	222.27	0.00	0.00	0.00
	1,400.00	20.00	33.21	1,373.78	173.16	113.37	206.97	0.00	0.00	0.00
	1,500.00	20.00	33.21	1,467.75	201.77	132.10	241.17	0.00	0.00	0.00
	1,506.65	20.00	33.21	1,474.00	203.68	133.35	243.45	0.00	0.00	0.00
	BIRDSNEST									
	1,600.00	20.00	33.21	1,561.72	230.39	150.84	275.37	0.00	0.00	0.00
	1,700.00	20.00	33.21	1,655.69	259.00	169.57	309.58	0.00	0.00	0.00
	1,800.00	20.00	33.21	1,749.66	287.62	188.31	343.78	0.00	0.00	0.00
	1,900.00	20.00	33.21	1,843.63	316.23	207.04	377.98	0.00	0.00	0.00
	2,000.00	20.00	33.21	1,937.60	344.85	225.78	412.18	0.00	0.00	0.00
	2,007.87	20.00	33.21	1,945.00	347.10	227.25	414.88	0.00	0.00	0.00
	MAHOGANY	20.00	00.21	1,010.00	017.10	227.20	111.00	0.00	0.00	0.00
	2,100.00	20.00	33.21	2,031.57	373.46	244.51	446.38	0.00	0.00	0.00
	2,200.00	20.00	33.21	2,125.54	402.08	263.24	480.59	0.00	0.00	0.00
	2,300.00	20.00	33.21	2,219.51	430.69	281.98	514.79	0.00	0.00	0.00
	2,400.00	20.00	33.21	2,313.48	459.31	300.71	548.99	0.00	0.00	0.00
	2,486.75	20.00	33.21	2,395.00	484.13	316.97	578.66	0.00	0.00	0.00
	8 5/8" 2,500.00	20.00	33.21	2,407.45	487.92	319.45	583.19	0.00	0.00	0.00
	2,537.54 Start Drop -2	20.00	33.21	2,442.72	498.66	326.48	596.03	0.00	0.00	0.00
	2,600.00	18.75	33.21	2,501.64	516.00	337.83	616.75	2.00	-2.00	0.00
	2,700.00	16.75	33.21	2,596.88	541.50	354.53	647.24	2.00	-2.00	0.00
	2,800.00	14.75	33.21	2,693.12	564.21	369.40	674.38	2.00	-2.00	0.00
	2,900.00	12.75	33.21	2,790.25	584.10	382.42	698.15	2.00	-2.00	0.00
	3,000.00	10.75	33.21	2,888.15	601.14	393.57	718.52	2.00	-2.00	0.00
	3,100.00	8.75	33.21	2,986.70	615.31	402.85	735.45	2.00	-2.00	0.00
	3,200.00	6.75	33.21	3,085.78	626.59	410.24	748.94	2.00	-2.00	0.00
	3,300.00	4.75	33.21	3,185.27	634.97	415.72	758.96	2.00	-2.00	0.00
	3,400.00	2.75	33.21	3,285.05	640.44	419.31	765.50	2.00	-2.00	0.00
	3,500.00	0.75	33.21	3,385.00	643.00	420.98	768.55	2.00	-2.00	0.00
	3,537.54	0.00	0.00	3,422.54	643.21	421.12	768.80	2.00	-2.00	0.00
		hold at 3537.54		,		-				
	3,600.00	0.00	0.00	3,485.00	643.21	421.12	768.80	0.00	0.00	0.00
	3,700.00	0.00	0.00	3,585.00	643.21	421.12	768.80	0.00	0.00	0.00
	3,800.00	0.00	0.00	3,685.00	643.21	421.12	768.80	0.00	0.00	0.00
<u> </u>										

RECEIVED: July 05, 2012



SDI Planning Report



EDM 5000.1 Single User Db Database: Company: Project:

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-3C PAD Site: Well: NBU 1022-3C1BS

Wellbore: ОН PI ΔN #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 1022-3C1BS

GL 5071 & KB 4 @ 5075.00ft (ASSUMED) GL 5071 & KB 4 @ 5075.00ft (ASSUMED)

True

Minimum Curvature

Design:	PLAN #1								
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,900.00	0.00	0.00	3,785.00	643.21	421.12	768.80	0.00	0.00	0.00
4,000.00	0.00	0.00	3,885.00	643.21	421.12	768.80	0.00	0.00	0.00
4,100.00	0.00	0.00	3,985.00	643.21	421.12	768.80	0.00	0.00	0.00
4,200.00	0.00	0.00	4,085.00	643.21	421.12	768.80	0.00	0.00	0.00
4,300.00	0.00	0.00	4,185.00	643.21	421.12	768.80	0.00	0.00	0.00
4,400.00 4,469.00	0.00 0.00	0.00 0.00	4,285.00 4,354.00	643.21 643.21	421.12 421.12 421.12	768.80 768.80	0.00 0.00	0.00 0.00	0.00 0.00 0.00
WASATCH									
4,500.00	0.00	0.00	4,385.00	643.21	421.12	768.80	0.00	0.00	0.00
4,600.00	0.00	0.00	4,485.00	643.21	421.12	768.80	0.00	0.00	0.00
4,700.00	0.00	0.00	4,585.00	643.21	421.12	768.80	0.00	0.00	0.00
4,800.00	0.00	0.00	4,685.00	643.21	421.12	768.80	0.00	0.00	0.00
4,900.00	0.00	0.00	4,785.00	643.21	421.12	768.80	0.00	0.00	0.00
5,000.00	0.00	0.00	4,885.00	643.21	421.12	768.80	0.00	0.00	0.00
5,100.00	0.00	0.00	4,985.00	643.21	421.12	768.80	0.00	0.00	0.00
5,200.00	0.00	0.00	5,085.00	643.21	421.12	768.80	0.00	0.00	0.00
5,300.00	0.00	0.00	5,185.00	643.21	421.12	768.80	0.00	0.00	0.00
5,400.00	0.00	0.00	5,285.00	643.21	421.12	768.80	0.00	0.00	0.00
5,500.00	0.00	0.00	5,385.00	643.21	421.12	768.80	0.00	0.00	0.00
5,600.00	0.00	0.00	5,485.00	643.21	421.12	768.80	0.00	0.00	0.00
5,700.00	0.00	0.00	5,585.00	643.21	421.12	768.80	0.00	0.00	0.00
5,800.00	0.00	0.00	5,685.00	643.21	421.12	768.80	0.00	0.00	0.00
5,900.00	0.00	0.00	5,785.00	643.21	421.12	768.80	0.00	0.00	0.00
6,000.00	0.00	0.00	5,885.00	643.21	421.12	768.80	0.00	0.00	0.00
6,100.00	0.00	0.00	5,985.00	643.21	421.12	768.80	0.00	0.00	0.00
6,200.00	0.00	0.00	6,085.00	643.21	421.12	768.80	0.00	0.00	0.00
6,300.00	0.00	0.00	6,185.00	643.21	421.12	768.80	0.00	0.00	0.00
6,400.00	0.00	0.00	6,285.00	643.21	421.12	768.80	0.00	0.00	0.00
6,500.00	0.00	0.00	6,385.00	643.21	421.12	768.80	0.00	0.00	0.00
6,600.00	0.00	0.00	6,485.00	643.21	421.12	768.80	0.00	0.00	0.00
6,700.00	0.00	0.00	6,585.00	643.21	421.12	768.80	0.00	0.00	0.00
6,800.00	0.00	0.00	6,685.00	643.21	421.12	768.80	0.00	0.00	0.00
6,830.00	0.00	0.00	6,715.00	643.21	421.12	768.80	0.00	0.00	0.00
6,900.00	0.00	0.00	6,785.00	643.21	421.12	768.80	0.00	0.00	0.00
7,000.00	0.00	0.00	6,885.00	643.21	421.12	768.80	0.00	0.00	0.00
7,100.00	0.00	0.00	6,985.00	643.21	421.12	768.80	0.00	0.00	0.00
7,200.00	0.00	0.00	7,085.00	643.21	421.12	768.80	0.00	0.00	0.00
7,300.00	0.00	0.00	7,185.00	643.21	421.12	768.80	0.00	0.00	0.00
7,400.00	0.00	0.00	7,285.00	643.21	421.12	768.80	0.00	0.00	0.00
7,500.00	0.00	0.00	7,385.00	643.21	421.12	768.80	0.00	0.00	0.00
7,600.00	0.00	0.00	7,485.00	643.21	421.12	768.80	0.00	0.00	0.00
7,700.00	0.00	0.00	7,585.00	643.21	421.12	768.80	0.00	0.00	0.00
7,800.00	0.00	0.00	7,685.00	643.21	421.12	768.80	0.00	0.00	0.00
7,900.00	0.00	0.00	7,785.00	643.21	421.12	768.80	0.00	0.00	0.00
8,000.00	0.00	0.00	7,885.00	643.21	421.12	768.80	0.00	0.00	0.00
8,100.00	0.00	0.00	7,985.00	643.21	421.12	768.80	0.00	0.00	0.00
8,200.00	0.00	0.00	8,085.00	643.21	421.12	768.80	0.00	0.00	0.00
8,300.00	0.00	0.00	8,185.00	643.21	421.12	768.80	0.00	0.00	0.00
8,400.00	0.00	0.00	8,285.00	643.21	421.12	768.80	0.00	0.00	0.00
8,500.00	0.00	0.00	8,385.00	643.21	421.12	768.80	0.00	0.00	0.00
8,600.00	0.00	0.00	8,485.00	643.21	421.12	768.80	0.00	0.00	0.00
8,700.00	0.00	0.00	8,585.00	643.21	421.12	768.80	0.00	0.00	0.00
8,800.00	0.00	0.00	8,685.00	643.21	421.12	768.80	0.00	0.00	0.00



SDIPlanning Report



Database: Company: Project:

Site:

EDM 5000.1 Single User Db US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N NBU 1022-3C PAD NBU 1022-3C1BS

Well: NBU 102
Wellbore: OH
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-3C1BS

GL 5071 & KB 4 @ 5075.00ft (ASSUMED) GL 5071 & KB 4 @ 5075.00ft (ASSUMED)

True

Minimum Curvature

nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,900.00 9,000.00 9,047.99	0.00 0.00 0.00	0.00 0.00 0.00	8,785.00 8,885.00 8,932.99	643.21 643.21 643.21	421.12 421.12 421.12	768.80 768.80 768.80	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
SEGO 9.048.00	0.00	0.00	8,933.00	643.21	421.12	768.80	0.00	0.00	0.00
.,	0 - PBHL_NBU 1		0,000.00	370.21	.21.12	. 30.00	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_NBU 1022-3C1B: - plan hits target cent - Circle (radius 25.00		0.00	8,933.00	643.21	421.12	14,524,411.50	2,080,956.34	39.984845	-109.427354

Casing Points							
	Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter	
	(ft)	(ft)		Name	(in)	(in)	
	2,486.75	2,395.00	8 5/8"		8.625	11.000	

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,166.14	1,153.00	GREEN RIVER			
	1,506.65	1,474.00	BIRDSNEST			
	2,007.87	1,945.00	MAHOGANY			
	4,469.00	4,354.00	WASATCH			
	6,830.00	6,715.00	MESAVERDE			
	9,047.99	8,932.99	SEGO		0.00	

Plan Annotations	Plan Annotations							
Measur	ed V	/ertical	Local Coord	linates				
Depth	1	Depth	+N/-S	+E/-W				
(ft)		(ft)	(ft)	(ft)	Comment			
30	0.00	300.00	0.00	0.00	Start Build 2.00			
1,30	0.00	1,279.82	144.54	94.63	Start 1237.54 hold at 1300.00 MD			
2,53	7.54	2,442.72	498.66	326.48	Start Drop -2.00			
3,53	7.54	3,422.54	643.21	421.12	Start 5510.46 hold at 3537.54 MD			
9,04	3.00	8,933.00	643.21	421.12	TD at 9048.00			

Surface Use Plan of Operations 1 of 13

NBU 1022-3C1BS/ 1022-3C1CS/ 1022-3D1BS/ 1022-3D1CS

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-3C PAD

<u>API #</u>	I	NBU 1022-3C1BS		
	Surface:	810 FNL / 1682 FWL	NENW	Lot 3
	BHL:	166 FNL / 2110 FWL	NENW	Lot 3
<u>API #</u>		NBU 1022-3C1CS		
	Surface:	806 FNL / 1692 FWL	NENW	Lot 3
	BHL:	619 FNL / 2130 FWL	NENW	Lot 3
<u>API #</u>	<u>.</u>	NBU 1022-3D1BS		
	Surface:	813 FNL / 1673 FWL	NENW	Lot 3
	BHL:	224 FNL / 833 FWL	NWNW	Lot 4
<u>API #</u>	<u>_</u>	NBU 1022-3D1CS		
	Surface:	817 FNL / 1664 FWL	NENW	Lot 3
	BHL:	581 FNL / 826 FWL	NWNW	Lot 4

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on December 6, 2011. Present were:

- · David Gordon, Tyler Cox BLM;
- · Jacob Dunham 609 Consulting;
- John Slaugh, Mitch Batty Timberline Engineering & Land Surveying, Inc.; and
- Gina Becker, Charles Chase, Doyle Holmes, Casey McGee, Grizz Oleen, Sheila Wopsock Kerr-McGee

A. Existing Roads:

Existing roads consist of county and improved/unimproved access roads (two-tracks). In accordance with Onshore Order #1, Kerr-McGee will, in accordance with BMPs, improve or maintain existing roads in a condition that is the same as or better than before operations began. New or reconstructed proposed access roads are discussed in Section B.

The existing roads will be maintained in a safe and usable condition. Maintenance for existing roads will continue until final abandonment and reclamation of well pads and/or other facilities, as applicable. Road maintenance will include, but is not limited to, blading, ditching, and/or culvert installation and cleanout. To ensure safe operating conditions, gravel surfacing will be performed where excessive rutting or erosion may occur. Dust control will be performed as necessary to ensure safe operating conditions.

Roads, gathering lines and electrical distribution lines will occupy common disturbance corridors where possible. Where available, roadways will be used as the staging area and working space for installation of gathering lines. All disturbances located in the same corridor will overlap each other to the maximum extent possible, while maintaining safe and sound construction and installation practices. Unless otherwise approved or requested in site specific documents, in no case will the maximum disturbance widths of the access road and utility corridors exceed the widths specified in Part D of this document.

Please refer to Topo B, for existing roads.

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B. New or Reconstructed Access Roads:

All new or reconstructed roads will be located, designed, and maintained to meet the standards of the BLM. BMPs. Described in the BLM's Surface Operating Standards for Oil and Gas Exploration and Development, 4th Edition (Gold Book) (USDI and USDA, 2007) and/or BLM Manual Section 9113 (1985) will be considered in consultation with the BLM in the design, construction, improvement and maintenance of all new or reconstructed roads. If a new road would cross a water of the United States, Kerr-McGee will adhere to the requirements of applicable Nationwide Permits of the Department of Army Corps of Engineers.

Each new well pad or pad expansion may require construction of a new access road and/or de-commissioning of an older road. Plans, routes, and distances for new roads and road improvements are provided in design packages, exhibits and maps for a project. Project-specific maps are submitted to depict the locations of existing, proposed, and/or decommissioned and include the locations for supporting structures, including, but not limited to, culverts, bridges, low water crossings, range infrastructure, and haul routes, as per OSO 1. Designs for cuts and fills, including spoils source and storage areas, are provided with the road designs, as necessary.

Where safety objectives can be met. As applicable, Kerr-McGee may use unimproved and/or two-track roads for lease operations, to lessen total disturbance.

Road designs will be based on the road safety requirements, traffic characteristics, environmental conditions, and the vehicles the road is intended to carry. Generally, newly constructed unpaved lease roads will be crowned and ditched with the running surfaces of the roads approximately 12-18 feet wide and a total road corridor width not to exceed 45 feet, except where noted in the road design for a specific project. Maximum grade will generally not exceed 8%. Borrow ditches will be back sloped 3:1 or less. Construction BMPs will be employed to control onsite and offsite erosion.

Where topography would direct storm water runoff to an access road or well pad, drainage ditches or other common drainage control facilities, such as V- or wing-ditches, will be constructed to divert surface water runoff. Drainage features, including culverts, will be constructed or installed prior to commencing other operations, including drilling or facilities placement. Riprap will be placed at the inlet and outlet at the culvert(s), as necessary.

Prior to construction, new access road(s) will be staked according to the requirements of OSO 1. Construction activity will not be conducted using frozen or saturated materials or during periods when significant watershed damage (e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur. Vegetative debris will not be placed in or under fill embankments.

New road maintenance will include, but is not limited to, blading, ditching, culvert installation and cleanout, gravel surfacing where excessive rutting or erosion may occur and dust control, as necessary to ensure safe operating conditions. All vehicular traffic, personnel movement, construction/restoration operations will be confined to the approved area and to existing roadways and/or access routes.

Snow removal will be conducted on an as-needed basis to accommodate safe travel. Snow removal will occur as necessary throughout the year, as will necessary drainage ditch construction. Removed snow may be stored on permitted well pads to reduce hauling distances and/or at the aerial extent of approved disturbance boundaries to facilitate snow removal for the remainder of the season.

If a county road crossing or encroachment permit is needed, it will be obtained prior to construction.

There are no new proposed access roads associated with this pad. Please refer to Topo B.

C. Location of Existing Wells:

A) Refer to Topo Map C.

D. Location of Existing and/or Proposed Facilities:

This pad will expand the existing pad for the NBU 165 and the NBU 1022-03CT wells, which are both producing gas wells according to the Utah Division of Oil, Gas and Mining (UDOGM) records on February 6, 2012. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

Should the well(s) prove productive, production facilities will be installed on the disturbed portion of each well pad. A berm will be constructed completely around production components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will generally be constructed of compacted subsoil or corrugated metal, and will hold the capacity of the largest tank and have sufficient freeboard to accomodate a 25 year rainfall event. This includes pumping units. Aboveground structures constructed or installed onsite for 6 months or longer, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with the BLM (typically Shadow Gray). A production facility layout is provided as part of a project-specific APD, ROW or NOS submission.

GAS GATHERING

Please refer to Exhibit A and Topo D2- Pad and Pipeline Detail.

The gas gathering pipeline material: Steel line pipe. Surface = Bare pipe. Buried = Coated with fusion bonded epoxy coating (or equivalent). The total gas gathering pipeline distance from the meter to the tie in point is ± 240 ' and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- ±215' (0.04 miles) Section 3 T10S R22E (NE/4 NW/4) On-lease UTU-01191, BLM surface, New 8" buried gas gathering pipeline from the meter to the edge of the pad. Please refer to Topo D2- Pad and Pipeline Detail.
- ±25' (0.004 miles) Section 3 T10S R22E (NE/4 NW/4) On-lease UTU-01191, BLM surface, New 8" buried gas gathering pipeline from the edge of the pad to tie-in to the approved 16" gas pipeline. Please refer to Topo D2- Pad and Pipeline Detail and Exhibit A, Line 11.

LIQUID GATHERING

Please refer to Exhibit B and Topo D2- Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 240^{\circ}$ and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- ±215' (0.04 miles) Section 3 T10S R22E (NE/4 NW/4) On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the separator to the edge of the pad. Please refer to Topo D2-Pad and Pipeline Detail.
- ±25' (0.004 miles) Section 3 T10S R22E (NE/4 NW/4) On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the edge of the pad to tie-in to the approved liquid pipeline. Please refer to Topo D2-Pad and Pipeline Detail and Exhibit B, Line 11.

Pipeline Gathering Construction

Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee. Gas gathering pipeline(s,) gas lift, or liquids pipelines may be constructed to lie on the surface or be buried. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. The area of disturbance during construction from the edge of road or well pad will typically be 30' in width. Where pipelines run cross country, the width of disturbance will typically

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be 45 ft for buried lines and 30 ft for surface lines. In addition, Kerr-McGee requests for a permanent 30' distrubance width that will be maintained for the portion adjacent to the road. The need for the 30' permanent distrubance width is for maintenance and repairs. Cross country permanent distrubance width also are required to be 30ft.

Above-ground installation will generally not require clearing of vegetation or blading of the surface, except where safety considerations necessitate earthwork. In some surface pipeline installation instances pipe cannot be constructed where it will lay. In these cases where an above-ground pipeline is constructed parallel and adjacent to a road, it will be welded/fused on the road and then lifted from the road to the pipeline route. In other cases where a pipeline route is not parallel and adjacent to a road (cross-country between sites), it will be welded/fused in place at a well pad, access road, or designated work area and pulled between connection locations with a suitable piece of equipment.

Buried pipelines will generally be installed parallel and adjacent to existing and/or newly constructed roads and within the permitted disturbance corridor. Buried pipelines may vary from 2 inches (typically fuel gas lines) to 24 inches (typically transportation lines) in diameter, but 6 to 16 inches is typical for a buried gas line. The diameter of liquids pipelines may vary from 2 inches to 12 inches, but 6 inches is the typical diameter. Gas lift lines may vary from 2 to 12 inches in diameter, but 6-inch diameter pipes are generally used for gas lift. If two or more pipelines are present (gas gathering, gas lift, and fluids), they will share a common trench where possible.

Typically, to install a buried pipeline, topsoil will be removed, windrowed and placed on the non-working side of the route for later reclamation. Because working room is limited, the spoil may be spread out across the working side and construction will take place on the spoil. The working side of the corridor will be used for pipe stringing, bending, welding and equipment travel. Small areas on the working side displaying ruts or uneven ground will be groomed to facilitate the safe passage of equipment. After the pipelines are installed, spoil will be placed back into the trench, and the topsoil will be redistributed over the disturbed corridor prior to final reclamation. Typical depth of the trench will be 6 feet, but depths may vary according to site-specific conditions (presence of bedrock, etc.). The proposed trench width for the pipeline would range from 18-48 inches.

The pipeline will be welded along the proposed route and lowered into place. Trenching equipment will cut through the soil or into the bedrock and create good backfill, eliminating the need to remove large rocks. The proposed buried pipeline will be visually and radiographically inspected and the entire pipeline will be pneumatically or hydrostatically tested before being placed into service. Routine vehicle traffic will be prevented from using pipeline routes as travel ways by posting signs at the route's intersection with an access road.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

If pipelines or roads encounter a drainage that could be subject to flooding or surface water during extreme precipitation events, Kerr-McGee will apply all applicable Army Corps mandates as well as the BLM's Hydraulic Considerations for Pipeline Crossings of Stream Channels (BLM Technical Note 423, April 2007). In addition, all stream and drainage crossings will be evaluated to determine the need for stream alteration permits from the State of Utah Division of Water Rights and if necessary, required permits will be secured. Similarly, where a road or pipeline crossing exists the pipe will be butt welded and buried to a depth between 24 and 48 inches or more. Dirt roads will be cut and restored to a condition equivalent to the existing condition. All Uintah County road encroachment and crossing permits, where applicable, will be obtained prior to crossing construction. In no case will pressure testing of pipelines result in discharge of liquids to the surface.

Pipeline signs will be installed along the route to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves and lateral T's will be installed at various locations for production integrity and safety purposes.

Upon completion of the proposed buried pipeline, the entire area of disturbance will be reclaimed to the standards proposed in the Green River District Reclamation Guidelines. Please refer to section J for more details regarding final reclamation.

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When no longer deemed necessary by the operator, Kerr-McGee or it's successor will consult with the BLM, Vernal Field Office before terminating of the use of the pipeline(s).

The Anadarko Completions Transportation System (ACTS) information:

Please refer to Exhibit C for ACTs Lines

Kerr-McGee will use either a closed loop drilling system that will require one pit and one storage area to be constructed on the drilling pad or a traditional drilling operation with one pit. The storage area will be used to contain only the de-watered drill cuttings and will be lined and reclaimed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit is lined and will be used for the wells drilled on the pad or used as part of our Anadarko Completions Transportation (ACTS) system which is disussed in more detail below. Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completion pit.

If Kerr-McGee does not use a closed loop system, it will construct a drilling reserve pit to contain drill cuttings and for use in completion operations. Depending on the location of the pit, its relation to future drilling locations, the reserve/completion pit will be utilized for the completion of the wells on that pad and/or be used as part of our ACTS system.

Kerr-McGee will use ACTS to optimize the completion processes for multiple pads across the project area which may include up to a section of development. ACTS will facilitate management of frac fluids by utilizing existing reserve pits and temporary, surface-laid aluminum liquids transfer lines between frac locations. The pit will be refurbished as follows when a traditional drill pit is used: mix and pile up drill cuttings with dry dirt, bury the original liner in the pit, walk bottom or pit with cat. Kerr-McGee will reline the pit with a 30 mil liner and double felt padding. The refurbished pit will be the same size or smaller as specified in the originally approved ROW/APD. The pit refurb will be done in a normal procedure and there will be no modification to the pit.

All four sides of the completions pit will be fenced in according to standard pit fencing procedures. Netting will be installed over all pits.

Any hydrocarbons collected will be treated and sold at approved sales facilities. A loading rack with drip containment will also be installed where water trucks would unload and load to prevent damage caused from pulling hoses in and out of the pit .

ACTS will require temporarily laying multiple 6" aluminum water transfer lines on the surface between either existing or refurbished reserve pits. Please see the attached ACTS exhibit C for placement of the proposed temporary lines. The temporary aluminum transfer lines will be utilized to transport frac fluid being injected and/or recovered during the completion process and will be laid adjacent to existing access roads or pipeline corridors. Upon completion of the frac operation, the liquids transfer lines will be flushed with fresh water and purged with compressed air. The contents of the transfer lines will be flushed into a water truck for delivery to another ACTS location or a reserve pit.

The volume of frac fluid transported through a water transfer line will vary, but volume is projected to be approximately 1.75 bbls per 50-foot joint. Although the maximum working pressure is 125 psig, the liquids transfer lines will be operated at a pressure of approximately 30 to 40 psig. Kerr-McGee requests to keep the netted pit open for one year from first production of the first produced well on the pad. During this time the surrounding well location completion fluids may be recycled in this pit and utilized for other frac jobs in the area. After one year Kerr-McGee will backfill the pit and reclaim. If the pit is not needed for an entire year it will be backfilled and reclaimed earlier. Kerr-McGee understands that due to the temporary nature of this system, BLM considers this a casual use situation; therefore, no permanent ROW or temporary use plan will need to be issued by the BLM.

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E. Location and Types of Water Supply:

Water for drilling and completion operations will be obtained from the following sources:

Permit # 49-2307	JD Field Services	Green River- Section 15, T2N, R22E
Permit # 49-2321	R.N. Industries	White River- Section 2, T10S, R24E
Permit # 49-2319	R.N. Industries	White River- Various Sources
Permit # 49-2320	R.N. Industries	Green River- Section 33, T8S, R23E

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

F. Construction Materials:

Construction operations will typically be completed with native materials found on location. Construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source (described in site-specific documents). No construction materials will be removed from federal lands without prior approval from the BLM. A source location other than an on-location construction site will be designated either via a map or narrative within the project specific materials provided to the BLM.

G. Methods for Handling Waste:

All wastes subject to regulation will be handled in compliance with applicable laws to minimize the potential for leaks or spills to the environment. Kerr-McGee also maintains a Spill Control and Countermeasure Plan, which includes notification requirements, including the BLM, for all reportable spills of oil, produced liquids, and hazardous materials.

Any accidental release, such as a leak or spill in excess of the reportable quantity, as established by 40 CFR Part 117.3, will be reported as per the requirements of CERCLA, Section 102 B. If a release involves petroleum hydrocarbons or produced liquids, Kerr-McGee will comply with the notification requirements of NTL-3A. Drill cuttings and/or drilling fluids will be contained in the reserve/frac pit whether a closed loop system is used or not. Cuttings will be buried in pit(s) upon closure. Unless specifically approved by the BLM, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface precipitation runoff into the pit (via appropriate placement of subsoil storage areas and/or construction of berms, ditches, etc). Should unexpected liquid petroleum hydrocarbons (crude oil or condensate) be encountered during drilling, completions or well testing, liquid petroleum hydrocarbons will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a reserve/completion pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by the BLM. Should timely removal not be feasible, the pit will be netted as soon as practical. Similarly, hydrocarbon removal will take place prior to the closure of the pit, unless authorization is provided for disposal via alternate pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with an impermeable liner. The liner will be a synthetic material 30 mil or thicker. The bottom and side walls of the pit will be void of any sharp rocks that could puncture the liner. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. After evaporation and when dry, the reserve pit liners will be cut off, ripped and/or folded back (as safety considerations allow) as near to the mud surface as possible and buried on location or hauled to a landfill prior to backfilling the pit with a minimum of five feet of soil material.

Where necessary and if conditions (freeboard, etc.) allow, produced liquids from newly completed wells may be temporarily disposed of into pits for a period not to exceed 90 days as per Onshore Order Number 7 (OSO 7). Subsequently, permanent approved produced water disposal methods will be employed in accordance with OSO 7 and/or

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as described in a Water Management Plan (WMP). Otherwise, fluids disposal locations and associated haul routes, for ROW consideration, are typically depicted on Topo A of individual projects. Revisions to the water source or method of transportation will be subject to written approval from the BLM.

Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after one year from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse (trash and other solid waste including cans, paper, cable, etc.) generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility. Immediately after removal of the drilling rig, all debris and other waste materials not contained within trash receptacles will be collected and removed from the well location.

For the protection of livestock and wildlife, all open pits (excluding flare pits) will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet. Siphons, catchments, and absorbent pads will be installed to keep hydrocarbons produced by the drilling rig or other equipment on location from entering the reserve pit. Hydrocarbons, contaminated pads, and/or soils will be disposed of in accordance with state and federal requirements.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Hazardous materials may be contained in some grease or lubricants, solvents, acids, paint, and herbicides, among others as defined above. Kerr-McGee maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances that are used during the course of construction, drilling, completion, and production operations for this project. The transport, use, storage and handling of hazardous materials will follow procedures specified by federal and state regulations. Transportation of hazardous materials to the well location is regulated by the Department of Transportation (DOT) under 49 CFR, Parts 171-180. DOT regulations pertain to the packing, container handling, labeling, vehicle placarding, and other safety aspects.

Potentially hazardous materials used in the development or operation of wells will be kept in limited quantities on well sites and at the production facilities for short periods of time. Chemicals meeting the criteria for being an acutely hazardous material/substance or meet the quantities criteria per BLM Instruction Memorandum No. 93-344 will not be used.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities (crude oil/condensate, produced

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water). They may also be kept in limited quantities on drilling sites (barite, diesel fuel, cement, cottonseed hulls etc.) for short periods of time during drilling or completion activities.

Fluids disposal and pipeline/haul routes are depicted on Topo Map A.

Any produced water separated from recoverable condensate from the proposed well will be contained in a water tank and will then be transported by pipeline and/or truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E NBU #159 in Sec. 35 T9S R21E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Or to one of the following Kerr-McGee active Salt Water Disposal (SWD) wells:

NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 34 T9S R21E

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

I. Well Site Layout:

The location, orientation and aerial extent of each drill pad, reserve/completion/flare pit (for closed loop or non-closed loop operations), access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure, proposed cuts and fills, and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment depending on whether a closed loop system is used. Surface distance may be less if using closed loop. But in either case, the area of distrubance will not exceed the maximum disturbance outlined in the attached exhibits.

For the protection of livestock and wildlife, all open pits and cellars will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Each well will utilize either a centralized tank battery, centralized fluids management system, or have tanks installed on its pad. Production/ Produced Liquid tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks will be kept reasonably free from surface accumulations of liquid hydrocarbons. The tanks are not to be used for disposal of liquids from additional sources without prior approval of BLM.

J. Plans for Surface Reclamation:

The surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. Interim reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

NBU 1022-3C1BS/ 1022-3C1CS/ 1022-3D1BS/ 1022-3D1CS

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Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation may include pit evaporation, fluid removal, pit solidification, re-contouring, ripping, spreading top soil, seeding, and/or weed control. Interim reclamation will be performed in accordance with OSO 1, or written notification will be provided to the BLM for approval. Where feasible, drilling locations, reserve pits, or access routes not utilized for production operations will be re-contoured to a natural appearance.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit. Disposal of pit fluids and linings is discussed in Section G.

Final Reclamation

Final reclamation will be performed for unproductive wells and after the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by Kerr-McGee. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. The BLM will be notified prior to commencement of reclamation operations. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring the site to the approximate contour that existed prior to pad construction, final grading will be conducted over the entire surface of the well site and access road. The area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers, where practical. The surface soil material will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep, where practical. The entire area will be uniformly covered with the depressions constructed perpendicular to the natural flow of water.

Reclamation of roads will be performed at the discretion of the BLM. All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded in accordance with the seeding specifications of the BLM.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to the BLM.

Measures Common to Interim and Final Reclamation

Soil preparation will be conducted using a disk for areas in need of more soil preparation following site preparation. This will provide primary soil tillage to a depth no greater than 6 inches. Prior to reseeding, compacted areas will be scarified by ripping or chiseling to loosen compacted soils, promote water infiltration, and improve soil aeration and root penetration.

2/14/2012

Seeding will occur year-round as conditions allow and will typically be accomplished through the use of a no-till rangeland style seed drill with a "picker box" in order to seed "fluffy" seed. Where drill seeding is not the preferred method, seed will be broadcast and then raked into the ground at double the rate of drill seeding. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The seed mixes will be selected from a list provided by or approved by the BLM, or a specific seed mix will be proposed by Kerr-McGee to the BLM and used after its approval. The selected specific seed mix for each well location and road segment will be utilized while performing interim and final reclamation for each project. All seed will be certified and tags will be maintained by Kerr-McGee. Every effort will be made to obtain "cheat grass free seed".

Seed Mix to be used for Well Site, Access Road, and Pipeline (as applicable):

Bonanza Area Mix	Pure Live Seed lbs/acre
Crested Wheat (Hycrest)	2
Bottlebrush Squirreltail	1
Western Wheatgrass	1
(Arriba)	
Indian Ricegrass	1
Fourwing Saltbush	2
Shadscale	2
Forage Kochia	0.25
Rocky Mountain Bee	0.5
Total	9.75

Additional soil amendments and/or stabilization may be required on sites with poor soils and/or excessive erosion potential. Where severe erosion can become a problem and/or the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. Slopes will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to: erosion control blankets, hydro-mulch, and/or bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage. Soil amendments such as "Sustain" (an organic fertilizer that will be applied at the rate 1,800 – 2,100 lbs/acre with seed) may also be dry broadcast or applied with hydro-seeding equipment.

Weed Control

All weed management will be done in accordance with the Vernal BLM Surface Disturbance Weed Policy. Noxious weeds will be controlled, as applicable, on project areas. Monitoring and management of noxious and/or invasive weeds of concern will be completed annually until the project is deemed successfully reclaimed by the surface management agency and/or owner according to the Anadarko Integrated Weed Management Plan. Noxious weed infestations will be mapped using a GPS unit and submitted to the BLM with information required in the Vernal BLM Surface Disturbance Weed Policy. If herbicide is to be applied it will be done according to an approved Pesticide Use Permit (PUP), inclusive of applicable locations. All pesticide applications will be recorded using a Pesticide Application Record (PAR) and will be submitted along with a Pesticide Use Report (PUR) annually prior to Dec. 31.

Monitoring

Monitoring of reclaimed project areas will be completed annually during the growing season and actions to ensure reclamation success will be taken as needed. During the first two growing seasons an ocular methodology will be used to determine the success of the reclamation activities. During the 3rd growing season a 200 point line intercept (quantitative) methodology will be used to obtain basal cover. The goal is to have the reclaimed area reach 30% basal cover when compared to the reference site. If after three growing seasons the area has not reached 30% basal cover, additional reclamation activities may be necessary. Monitoring will continue until the reclaimed area reaches 75% basal cover of desirable vegetation when compared to the reference site. (Green River District Reclamation Guidelines)

All monitoring reports will be submitted electronically to the Vernal BLM in the form of a geo-database no later than March 1st of the calendar year following the data collection.

K. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

L. Other Information:

Onsite Specifics:

None

Cultural and Paleontological Resources

All personnel are strictly prohibited from collecting artifacts, any paleontological specimens or fossils, and from disturbing any significant cultural resources in the area. If artifacts, fossils, or any culturally sensitive materials are exposed or identified in the area of construction, all construction operations that would affect the newly discovered resource will cease, and Kerr-McGee will provide immediate notification to the BLM.

Resource Reports:

A Class I literature review was completed on February 1, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 11-404.

A paleontological reconnaissance survey was completed on February 3, 2012 by Intermountain Paleo Consultants. For additional details please refer to report IPC 11-202PRE.

Biological field survey was completed on June 15, 2011 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-684.

Proposed Action Annual Emissions Tables:

Table 1: Proposed Action Annual Emissions (tons/year) ¹				
Pollutant	Development	Production	Total	
NOx	3.8	0.12	3.92	
CO	2.2	0.11	2.31	
VOC	0.1	4.9	5	
SO_2	0.005	0.0043	0.0093	
PM_{10}	1.7	0.11	1.81	
PM _{2.5}	0.4	0.025	0.425	
Benzene	2.2E-03	0.044	0.046	
Toluene	1.6E-03	0.103	0.105	
Ethylbenzene	3.4E-04	0.005	0.005	
Xylene	1.1E-03	0.076	0.077	
n-Hexane	1.7E-04	0.145	0.145	
Formaldehyde	1.3E-02	8.64E-05	1.31E-02	

¹ Emissions include 1 producing well and associated operations traffic during the year in which the project is developed

API Well Number: 43047529240000

NBU 1022-3C1BS/ 1022-3C1CS/ 1022-3D1BS/ 1022-3D1CS

Surface Use Plan of Operations 12 of 13

Table 2: Proposed Action versus 2012 WRAP Phase III Emissions Inventory Comparison			
	Production Emissions	WRAP Phase III 2012 Uintah Basin Emission	to WRAP Phase
Species	(ton/yr)	Inventory ^a (ton/yr)	III
NOx	31.36	16,547	0.19%
VOC	40	127,495	0.03%

a http://www.wrapair.org/forums/ogwg/PhaseIII_Inventory.html

Uintah Basin Data

API Well Number: 43047529240000

NBU 1022-3C1BS/ 1022-3C1CS/ 1022-3D1BS/ 1022-3D1CS

Surface Use Plan of Operations 13 of 13

M. Lessee's or Operators' Representative & Certification:

Gina T. Becker Regulatory Analyst II Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6086 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Gira T Pagkar

February 14, 2012

Date



Kerr-McGee Oil & Gas Onshore LP 1099 18TH STREET STE. 1800 DENVER, CO 80202 720-929-6708 • FAX 720-929-7708 E-MAIL: JOE.JOHNSON@ANADARKO.COM

February 13, 2012

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11

NBU 1022-3C1BS

T10S-R22E

Section 3: NENW/NENW Surface: 810' FNL, 1682' FWL Bottom Hole: 166' FNL, 2110' FWL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-3C1BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

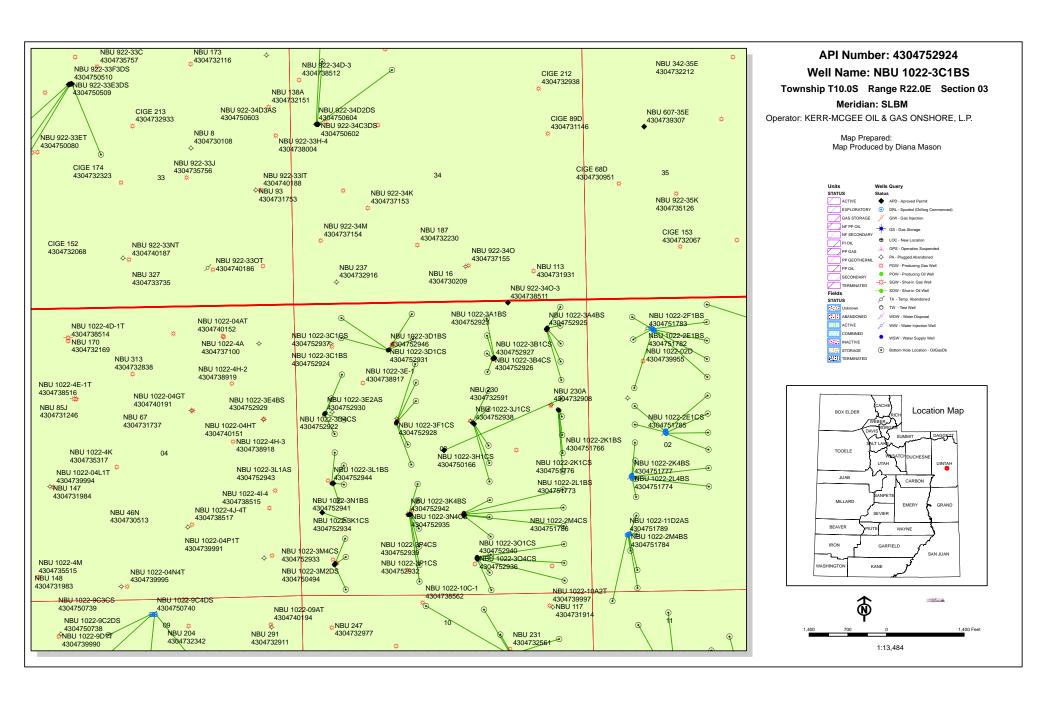
Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joseph D. Johnson Landman

RECEIVED: July 05, 2012



API Well Number: 43047529240000

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

July 16, 2012

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

WELL PAD - NBU 1022-3H

43-047-52902 NBU 1022-3H4CS Sec 03 T10S R22E 1949 FNL 0549 FEL BHL Sec 03 T10S R22E 2396 FNL 0494 FEL Sec 03 T10S R22E 1939 FNL 0567 FEL 43-047-52906 NBU 1022-3I1CS BHL Sec 03 T10S R22E 2232 FSL 0494 FEL 43-047-52910 NBU 1022-3H4BS Sec 03 T10S R22E 1953 FNL 0540 FEL BHL Sec 03 T10S R22E 2065 FNL 0494 FEL 43-047-52914 NBU 1022-3I1BS Sec 03 T10S R22E 1944 FNL 0558 FEL BHL Sec 03 T10S R22E 2562 FSL 0494 FEL WELL PAD - NBU 1022-3G 43-047-52903 NBU 1022-3J1BS Sec 03 T10S R22E 2166 FNL 2090 FEL BHL Sec 03 T10S R22E 2402 FSL 1820 FEL 43-047-52907 NBU 1022-3G1CS Sec 03 T10S R22E 2153 FNL 2105 FEL BHL Sec 03 T10S R22E 1903 FNL 1821 FEL 43-047-52917 NBU 1022-3G1BS Sec 03 T10S R22E 2146 FNL 2112 FEL BHL Sec 03 T10S R22E 1572 FNL 1821 FEL 43-047-52938 NBU 1022-3J1CS Sec 03 T10S R22E 2159 FNL 2097 FEL BHL Sec 03 T10S R22E 2071 FSL 1820 FEL

RECEIVED: July 18, 2012

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

WELL PAD - NBU 1022-3F

43-047-52904 NBU 1022-3K1BS Sec 03 T10S R22E 2143 FNL 1787 FWL BHL Sec 03 T10S R22E 2399 FSL 2046 FWL

43-047-52913 NBU 1022-3F4CS Sec 03 T10S R22E 2133 FNL 1790 FWL

BHL Sec 03 T10S R22E 2531 FNL 1987 FWL

43-047-52919 NBU 1022-3F1BS Sec 03 T10S R22E 2114 FNL 1795 FWL

BHL Sec 03 T10S R22E 1411 FNL 2159 FWL

43-047-52921 NBU 1022-3C4CS Sec 03 T10S R22E 2104 FNL 1798 FWL

BHL Sec 03 T10S R22E 1078 FNL 2153 FWL

43-047-52928 NBU 1022-3F1CS Sec 03 T10S R22E 2123 FNL 1793 FWL

BHL Sec 03 T10S R22E 1742 FNL 2152 FWL

WELL PAD - NBU 1022-3J

43-047-52905 NBU 1022-3J4BS Sec 03 T10S R22E 1505 FSL 2293 FEL

BHL Sec 03 T10S R22E 1740 FSL 1820 FEL

43-047-52908 NBU 1022-3I4BS Sec 03 T10S R22E 1496 FSL 2294 FEL

BHL Sec 03 T10S R22E 1901 FSL 0494 FEL

43-047-52912 NBU 1022-301BS Sec 03 T10S R22E 1456 FSL 2295 FEL

BHL Sec 03 T10S R22E 1077 FSL 1819 FEL

43-047-52915 NBU 1022-3P1BS Sec 03 T10S R22E 1466 FSL 2295 FEL

BHL Sec 03 T10S R22E 1240 FSL 0494 FEL

43-047-52916 NBU 1022-3I4CS Sec 03 T10S R22E 1486 FSL 2294 FEL

BHL Sec 03 T10S R22E 1571 FSL 0494 FEL

WELL PAD - NBU 1022-3A

43-047-52909 NBU 1022-3H1BS Sec 03 T10S R22E 0488 FNL 0748 FEL

BHL Sec 03 T10S R22E 1405 FNL 0495 FEL

43-047-52923 NBU 1022-3A1BS Sec 03 T10S R22E 0453 FNL 0728 FEL

BHL Sec 03 T10S R22E 0083 FNL 0488 FEL

43-047-52925 NBU 1022-3A4BS Sec 03 T10S R22E 0470 FNL 0738 FEL

BHL Sec 03 T10S R22E 0744 FNL 0495 FEL

WELL PAD - NBU 1022-3K

43-047-52918 NBU 1022-3N1CS Sec 03 T10S R22E 1500 FSL 2008 FWL

BHL Sec 03 T10S R22E 0913 FSL 2150 FWL

43-047-52934 NBU 1022-3K1CS Sec 03 T10S R22E 1493 FSL 1969 FWL

BHL Sec 03 T10S R22E 2047 FSL 2147 FWL

43-047-52935 NBU 1022-3N4CS Sec 03 T10S R22E 1496 FSL 1988 FWL

BHL Sec 03 T10S R22E 0287 FSL 2143 FWL

43-047-52941 NBU 1022-3N1BS Sec 03 T10S R22E 1501 FSL 2018 FWL

BHL Sec 03 T10S R22E 1244 FSL 2150 FWL

43-047-52942 NBU 1022-3K4BS Sec 03 T10S R22E 1494 FSL 1978 FWL

BHL Sec 03 T10S R22E 1760 FSL 2154 FWL

Page 2

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

WELL PAD - NBU 1022-3E

43-047-52920 NBU 1022-3E4CS Sec 03 T10S R22E 1960 FNL 0490 FWL

BHL Sec 03 T10S R22E 2324 FNL 0667 FWL

43-047-52922 NBU 1022-3D4CS Sec 03 T10S R22E 1939 FNL 0511 FWL

BHL Sec 03 T10S R22E 1245 FNL 0826 FWL

43-047-52929 NBU 1022-3E4BS Sec 03 T10S R22E 1953 FNL 0497 FWL

BHL Sec 03 T10S R22E 2057 FNL 0841 FWL

43-047-52930 NBU 1022-3E2AS Sec 03 T10S R22E 1946 FNL 0504 FWL

BHL Sec 03 T10S R22E 1676 FNL 0625 FWL

WELL PAD - NBU 1022-3C

43-047-52924 NBU 1022-3C1BS Sec 03 T10S R22E 0810 FNL 1682 FWL

BHL Sec 03 T10S R22E 0166 FNL 2110 FWL

43-047-52931 NBU 1022-3D1CS Sec 03 T10S R22E 0817 FNL 1664 FWL

BHL Sec 03 T10S R22E 0581 FNL 0826 FWL

43-047-52937 NBU 1022-3C1CS Sec 03 T10S R22E 0806 FNL 1692 FWL

BHL Sec 03 T10S R22E 0619 FNL 2130 FWL

43-047-52946 NBU 1022-3D1BS Sec 03 T10S R22E 0813 FNL 1673 FWL

BHL Sec 03 T10S R22E 0224 FNL 0833 FWL

WELL PAD - NBU 1022-3B

43-047-52926 NBU 1022-3B4CS Sec 03 T10S R22E 0998 FNL 1724 FEL

BHL Sec 03 T10S R22E 1241 FNL 1822 FEL

43-047-52927 NBU 1022-3B1CS Sec 03 T10S R22E 0988 FNL 1706 FEL

BHL Sec 03 T10S R22E 0578 FNL 1822 FEL

WELL PAD - NBU 1022-30

43-047-52932 NBU 1022-3P1CS Sec 03 T10S R22E 0699 FSL 2072 FEL

BHL Sec 03 T10S R22E 0909 FSL 0494 FEL

43-047-52936 NBU 1022-304CS Sec 03 T10S R22E 0660 FSL 2065 FEL

BHL Sec 03 T10S R22E 0106 FSL 1825 FEL

43-047-52939 NBU 1022-3P4CS Sec 03 T10S R22E 0680 FSL 2069 FEL

BHL Sec 03 T10S R22E 0256 FSL 0500 FEL

43-047-52940 NBU 1022-301CS Sec 03 T10S R22E 0709 FSL 2073 FEL

BHL Sec 03 T10S R22E 0746 FSL 1819 FEL

WELL PAD - NBU 1022-3M

43-047-52933 NBU 1022-3M4CS Sec 03 T10S R22E 0607 FSL 0615 FWL

BHL Sec 03 T10S R22E 0163 FSL 0812 FWL

WELL PAD - NBU 1022-3L

43-047-52943 NBU 1022-3L1AS Sec 03 T10S R22E 2086 FSL 0607 FWL

BHL Sec 03 T10S R22E 2411 FSL 0825 FWL

43-047-52944 NBU 1022-3L1BS Sec 03 T10S R22E 2086 FSL 0597 FWL

BHL Sec 03 T10S R22E 2644 FSL 0665 FWL

Page 3

API Well Number: 43047529240000

Page 4

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard

Div. cn=Michael L. Coulthard, o=Bureau of Land Management,
ousBranch of Minerals, email=Michael_Coulthard@blm.gov, c=US
Date: 2012.07.16 13:26:05-06:00'

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron

Agr. Sec. Chron Fluid Chron

MCoulthard:mc:7-16-12

RECEIVED: July 18, 2012

API Well Number: 43047529240000

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/5/2012 API NO. ASSIGNED: 43047529240000

WELL NAME: NBU 1022-3C1BS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) PHONE NUMBER: 720 929-6086

CONTACT: Gina Becker

PROPOSED LOCATION: NENW 03 100S 220E **Permit Tech Review:**

> **SURFACE: 0810 FNL 1682 FWL Engineering Review:**

> **BOTTOM:** 0166 FNL 2110 FWL Geology Review:

COUNTY: UINTAH

LATITUDE: 39.98294 LONGITUDE: -109.42949 UTM SURF EASTINGS: 634094.00 NORTHINGS: 4427045.00

FIELD NAME: NATURAL BUTTES LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-01191 PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 1 - Federal **COALBED METHANE: NO**

RECEIVED AND/OR REVIEWED: LOCATION AND SITING:

✓ PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: FEDERAL - WYB000291

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit**

Board Cause No: Cause 173-14 Water Permit: 43-8496

Effective Date: 12/2/1999 **RDCC Review:**

Siting: Suspends General Siting Fee Surface Agreement

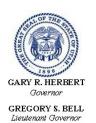
✓ Intent to Commingle R649-3-11. Directional Drill

Commingling Approved

Comments: Presite Completed

Stipulations:

3 - Commingling - ddoucet 4 - Federal Approval - dmason 15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 1022-3C1BS **API Well Number:** 43047529240000

Lease Number: UTU-01191 Surface Owner: FEDERAL Approval Date: 8/21/2012

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil

shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
 - Requests to Change Plans (Form 9) due prior to implementation
 - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
 - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 2 7 2012

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

5.	Lease Serial No.
	UTU01191

		01001191
APPLICATION FOR PERMIT	TO DRILL OR BEENVERNAL, UTA!	6. If Indian, Allottee or Tribe Name
1a. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No. UTU63047A
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ O	ther Single Zone Multiple Zone	8. Lease Name and Well No. NBU 1022-3C1BS
2. Name of Operator Contact KERR-MCGEE OIL & GAS ONSHORMail: GINA.	GINA T BECKER BECKER@ANADARKO.COM	9. API Well No. 43.047.52924
3a. Address P.O. BOX 173779 DENVER, CO 80202-3779	3b. Phone No. (include area code) Ph: 720-929-6086 Fx: 720-929-7086	10. Field and Pool, or Exploratory NATURAL BUTTES
4. Location of Well (Report location clearly and in accord	ance with any State requirements.*)	11. Sec., T., R., M., or Blk. and Survey or Ar
At surface NENW Lot 3 810FNL 168	2FWL 39.983044 N Lat, 109.429540 W Lon	Sec 3 T10S R22E Mer SLB
At proposed prod. zone NENW Lot 3 166FNL 2110	DFWL 39.984811 N Lat, 109.428036 W Lon	
14. Distance in miles and direction from nearest town or post APPROXIMATELY 57 MILES SOUTHEAST OF	office* VERNAL, UTAH	12. County or Parish UINTAH 13. Sta
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)166	16. No. of Acres in Lease 1042.00	17. Spacing Unit dedicated to this well
18. Distance from proposed location to nearest well, drilling,	19. Proposed Depth	20. BLM/BIA Bond No. on file
completed, applied for, on this lease, ft. 658	9048 MD 8933 TVD	WYB000291
21. Elevations (Show whether DF, KB, RT, GL, etc. 5072 GL	22. Approximate date work will start 08/08/2012	23. Estimated duration 60-90 DAYS
	24. Attachments	
The following, completed in accordance with the requirements of	of Onshore Oil and Gas Order No. 1, shall be attached to the	nis form:
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Sys SUPO shall be filed with the appropriate Forest Service Of 	Item 20 above).	ormation and/or plans as may be required by the
25. Signature (Electronic Submission)	Name (Printed/Typed) GINA T BECKER Ph: 720-929-6086	NECEIVED Date 02/14/2012
Title REGULATORY ANALYST II		AUU 2 / ZUIZ
Approved by (Signature)	Name (Printed/Typed)Jerry Kenczka	DIV. OF OIL, GAS & MINING Date AUG 1 7 2
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	E
Application approval does not warrant or certify the applicant ho	lds legal or equitable title to those rights in the subject lea	se which would entitle the applicant to conduct

Additional Operator Remarks (see next page)



Electronic Submission #130921 verified by the BLM Well Information System For KERR-MCGEE OIL & GAS ONSHORE, sent to the Vernal

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NOTICE OF APPROVAL

operations thereon.
Conditions of approval, if any, are attached.

. CONDITIONS OF APPROVAL ATTACHED

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

127.11.0178A9

115-11/29/11



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

API No:

Kerr McGee Oil & Gas Onshore

170 South 500 East

1022-3C1BS

43-047-52924

Location:

Lot 3, Sec. 3, T10S, R22E

Lease No: Agreement:

UTU-01191 Natural Buttes

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER:

(435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- -	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut vn opreport@blm.gov.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 8 Well: Bonanza 1022-3C1BS

7/31/2012

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

Site Specific COA's

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NOx per horsepower-hour.
- The following would be used as standard operating procedures: Green completion or controlled VOC emissions methods with 90% efficiency for Oil or Gas Atmospheric Storage Tanks, VOC Venting controls or flaring, Glycol Dehydration and Amine Unites, Well Completion, Re-Completion, Venting, and Planned Blowdown Emissions.
- All reclamation activities will comply with the Green River Reclamation Guidelines.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved
 method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent
 weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.
- Noxious and invasive weeds will be controlled by the proponent throughout the area of project disturbance.
- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an
 integrated pest management program is applicable, coordination has been undertaken with the
 state and local management program (if existing). A copy of the pest management plan will be
 submitted for each project.

Page 3 of 8 Well: Bonanza 1022-3C1BS 7/31/2012

- A pesticide use proposal (PUP) will be obtained for the project, by the proponent if applicable.
- A permitted paleontologist is to be present to monitor construction at all well pads during all surface disturbing actives: examples include the following; building of the well pad, access road, and pipelines.

To maintain compliance with current cactus survey protocols, the following measures will be required:

- If construction does not occur within 4 years of the original survey date, new 100% clearance surveys will be required.
- Prior to construction within 4 years of the original survey date, a spot check survey will be required during the year of construction. KMG and their respective 3rd party surveyor will refer to the current Sclerocactus Spot Check Survey Methods, to determine site specific survey distances and intensity levels.
- Spot check reports will be reported to the BLM and the US Fish and Wildlife Service.
- Construction will not commence until written approval is received from the BLM

Discovery Stipulation: Reinitiation of section 7 consultation with the USFWS will be sought immediately if any loss of plants or occupied habitat for Uinta Basin hookless cactus is anticipated as a result of project activities.

- Construction or drilling is not allowed from January 1 August 31 on the NBU 1022-30 pad to minimize impacts during golden eagle nesting.
- If it is anticipated that construction or drilling will occur during the given timing restriction, a BLM or
 qualified biologist shall be notified to conduct surveys for raptors. Depending upon the results of
 the surveys, permission to proceed may or may not be granted by the Authorized Officer.
- The best method to avoid entrainment is to pump from an off-channel location one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.
- If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:
 - a. do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes:
 - b. limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 31); and
 - c. limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.
- Screen all pump intakes with 3/32 inch mesh material.
- Approach velocities for intake structures will follow the National Marine Fisheries Service's
 document "Fish Screening Criteria for Anadromous Salmonids". For projects with an in-stream
 intake that operate in stream reaches where larval fish may be present, the approach velocity will
 not exceed 0.33 feet per second (ft/s).

Page 4 of 8 Well: Bonanza 1022-3C1BS 7/31/2012

• Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

Northeastern Region 152 East 100 North, Vernal, UT 84078 Phone: (435) 781-9453

• Kerr McGee can only use the following water source: Permit # 49-2307 JD Field Services Green River-Section 15, T2N, R22E

Page 5 of 8 Well: Bonanza 1022-3C1BS 7/31/2012

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Surface casing cement shall be brought to surface.
- Production casing cement shall be brought 200' up and into the surface casing.
- Electronic/mechanical mud monitoring equipment shall be required, from surface casing shoe to TD, which shall include as a minimum: pit volume totalizer (PVT); stroke counter; and flow sensor.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
 drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
 No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
 test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
 log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
 encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
 Field Office.

Page 6 of 8 Well: Bonanza 1022-3C1BS 7/31/2012

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
 Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 7 of 8 Well: Bonanza 1022-3C1BS

7/31/2012

OPERATING REQUIREMENT REMINDERS:

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
 notified when it is placed in a producing status. Such notification will be by written communication
 and must be received in this office by not later than the fifth business day following the date on
 which the well is placed on production. The notification shall provide, as a minimum, the following
 informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - o Well location (1/41/4, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

Page 8 of 8 Well: Bonanza 1022-3C1BS 7/31/2012

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
 Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
 future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
 BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
 hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
 be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior approval
 of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
 approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
 of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office
 Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in
 order that a representative may witness plugging operations. If a well is suspended or abandoned,
 all pits must be fenced immediately until they are backfilled. The "Subsequent Report of
 Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of
 the well bore, showing location of plugs, amount of cement in each, and amount of casing left in
 hole, and the current status of the surface restoration.

Sundry Number: 40256 API Well Number: 43047529240000

	STATE OF UTAH		FORM 9	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191	
SUNDR	RY NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal l n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3C1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047529240000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PHC n Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0810 FNL 1682 FWL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 03 Township: 10.0S Range: 22.0E Meridian:	S	STATE: UTAH	
11. CHECH	K APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
NOTICE OF INTENT Approximate date work will start: 8/21/2013 SUBSEQUENT REPORT Date of Work Completion: SPUD REPORT Date of Spud: DRILLING REPORT Report Date:	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF	CHANGE TUBING COMMINGLE PRODUCING FORMATIONS FRACTURE TREAT PLUG AND ABANDON RECLAMATION OF WELL SITE SIDETRACK TO REPAIR WELL VENT OR FLARE SI TA STATUS EXTENSION	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION	
Kerr-McGee Oil & G an extension to this	COMPLETED OPERATIONS. Clearly show all pe as Onshore, L.P. (Kerr-McGee) APD for the maximum time allowith any questions and/or comm	respectfully requests wed. Please contact	lepths, volumes, etc. Approved by the Utah Division of Oil, Gas and Mining Date: July 22, 2013 By:	
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist		
SIGNATURE N/A		DATE 7/19/2013		

Sundry Number: 40256 API Well Number: 43047529240000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047529240000

API: 43047529240000 Well Name: NBU 1022-3C1BS

Location: 0810 FNL 1682 FWL QTR NENW SEC 03 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 8/21/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? (Yes (No
• Has the approved source of water for drilling changed? Yes No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Teena Paulo Date: 7/19/2013

Sig

Title: Staff Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 41925 API Well Number: 43047529240000

	STATE OF UTAH		FORM 9	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191	
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
	oposals to drill new wells, significantly of reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3C1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047529240000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 73779 720 929-0	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0810 FNL 1682 FWL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENW Section: (HIP, RANGE, MERIDIAN: 03 Township: 10.0S Range: 22.0E Merio	dian: S	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION	
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
✓ SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
Date of Spud: 8/28/2013	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
0/20/2013	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL	
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION	
Report Date:		SI TA STATUS EXTENSION		
	WILDCAT WELL DETERMINATION	OTHER	OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Spud well 08/28/2013 @ 16:00. Drill 24" conductor hole to 40', run 14" X .250 wall conductor pipe, cement with 81 sacks ready mix. Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY September 03, 2013				
NAME (PLEASE PRINT) Doreen Green	PHONE NUMBI 435 781-9758	ER TITLE Regulatory Analyst II		
SIGNATURE		DATE		
N/A		9/3/2013		

State of Utah - Notification Form

Operator ANADARKO PETROLEUM Rig Name/# SST 8 Submitted By JOSH SHEPPARD Phone Number 435-828 Well Name/Number NBU 1022-Ø3C1BS Qtr/Qtr NE / NW Section 03 Township 10S Range Lease Serial Number UTU01191 API Number 4304752924	
<u>Casing</u> – Time casing run starts, not cementing times.	
☐ Production Casing☐ Other	
Date/Time AM]
BOPE Initial BOPE test at surface casing point Other	
Date/Time <u>11/21/2013</u> <u>0900</u> AM _ PM _	
Rig Move Location To: AM PM	1 🗌
RemarksTIME IS ESTIMATED	RECEIVED

DIV. OF OIL, GAS & MINING

State of Utah - Notification Form

Operator <u>ANADARKO PETROLEUM</u> Rig Name/# <u>SS</u> Submitted By <u>JOSH SHEPPARD</u> Phone Number <u>435-</u> Well Name/Number <u>NBU 1022-03C1BS</u> Qtr/Qtr <u>NE / NW</u> Section <u>03</u> Township <u>10S</u> F Lease Serial Number <u>UTU01191</u> API Number <u>4304752924</u>	828-0987_
<u>Casing</u> – Time casing run starts, not cementing time	S.
☐ Production Casing ☐ Other	
Date/Time <u>11/25/2013</u> <u>0300</u> AM [] F	РМ 🗌
BOPE Initial BOPE test at surface casing point Other	
Date/Time AM [] PM []	
Rig Move Location To: <u>NBU 1022-3D1BS</u>	·
Date/Time <u>11/25/2013</u> <u>1700</u> AM [] PI	М
RemarksTIME IS ESTIMATED	RECEIVED 1012 4 2013
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Sundry Number: 46352 API Well Number: 43047529240000

	STATE OF UTAH				FORM 9
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191		
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	posals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: NBU 1022-3C1BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUMBER: 43047529240000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 802		ONE NUMBER: 79 720 929-6		and POOL or WILDCAT: AL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0810 FNL 1682 FWL				COUNTY	
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENW Section: (IIP, RANGE, MERIDIAN: 03 Township: 10.0S Range: 22.0E Me	ridian:	S	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE N.	ATURE OF NOTICE, REPOR	T, OR C	THER DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION COMPLETED OPERATIONS. Clearly show to 9,050 ft.TD in Quarter	((((((((((_	FOI	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION ER: LUMES, etc. Accepted by the Utah Division of il, Gas and Mining R RECORD ONLY January 03, 2014
NAME (PLEASE PRINT)	PHONE NUM	BER	TITLE		
Kay E. Kelly SIGNATURE	720 929 6582		Regulatory Analyst DATE		
N/A			1/2/2014		

RECEIVED: Jan. 02, 2014

Sundry Number: 47461 API Well Number: 43047529240000

	FORM 9						
ī	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191						
SUNDR	Y NOTICES AND REPORTS	ON WE	LLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	posals to drill new wells, significantly of eenter plugged wells, or to drill horizon for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: NBU 1022-3C1BS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON		9. API NUMBER: 43047529240000					
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 80217	PHONE N 0 7 3779		9. FIELD and POOL or WILDCAT: 6 INATERAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0810 FNL 1682 FWL		COUNTY: UINTAH					
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NENW Section: (IIP, RANGE, MERIDIAN: 03 Township: 10.0S Range: 22.0E Merio	dian: S		STATE: UTAH			
11. CHECI	APPROPRIATE BOXES TO INDICAT	ΓΕ NATUF	RE OF NOTICE, REPOR	RT, OR OTHER DATA			
TYPE OF SUBMISSION		7	TYPE OF ACTION				
_	ACIDIZE	☐ ALTER C	ASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE	TUBING	CHANGE WELL NAME			
Z auparaurur proper	CHANGE WELL STATUS	СОММІМ	GLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion: 1/31/2014	DEEPEN	FRACTU	RE TREAT	NEW CONSTRUCTION			
	OPERATOR CHANGE	PLUG AN	ND ABANDON	PLUG BACK			
SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	RECLAM	ATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
	REPERFORATE CURRENT FORMATION	SIDETRA	CK TO REPAIR WELL	TEMPORARY ABANDON			
DRILLING REPORT Report Date:	TUBING REPAIR	VENT OR	RFLARE	WATER DISPOSAL			
	WATER SHUTOFF	SI TA ST	ATUS EXTENSION	APD EXTENSION			
	WILDCAT WELL DETERMINATION	OTHER		OTHER:			
	COMPLETED OPERATIONS. Clearly show a			Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 04, 2014			
NAME (PLEASE PRINT) Doreen Green	PHONE NUMB 435 781-9758		_E gulatory Analyst II				
SIGNATURE N/A		DAT 2/4	TE 5/2014				

RECEIVED: Feb. 04, 2014

API Well Number: 43047529240000

Form 3160-4 FORM APPROVED UNITED STATES OMB No. 1004-0137 (August 2007) DEPARTMENT OF THE INTERIOR Expires: July 31, 2010 BUREAU OF LAND MANAGEMENT WELL COMPLETION OR RECOMPLETION REPORT AND LOG Lease Serial No. UTU01191 1a. Type of Well Oil Well **⊠** Gas Well 6. If Indian, Allottee or Tribe Name □ Dry □ Other b. Type of Completion New Well ■ Work Over Deepen □ Plug Back □ Diff. Resvr. Unit or CA Agreement Name and No. Other UTU63047A Name of Operator Contact: KAY KELL KERR-MCGEE OIL AND GAS ONSH@RMEail: kay.kelly@anadarko.com Lease Name and Well No. NBU 1022-3C1BS Contact: KAY KELLY P.O. BOX 173779 3a. Phone No. (include area code) 9. API Well No. DENVER, CO 82017 Ph: 720-929-6000 43-047-52924 10. Field and Pool, or Exploratory 4. Location of Well (Report location clearly and in accordance with Federal requirements)* NATURAL BUTTES NENW 810FNL 1682FWL 39.983044 N Lat, 109.429540 W Lon At surface 11. Sec., T., R., M., or Block and Surve or Area Sec 3 T10S R22E Mer SLB At top prod interval reported below NENW 159FNL 2094FWL 12. County or Parish State UINTÁH NENW 185FNL 2114FWL UT 14. Date Spudded 08/28/2013 15. Date T.D. Reached 16. Date Completed 17. Elevations (DF, KB, RT, GL)* 11/24/2013 □ D & A Ready to Prod. 5095 KB 01/31/2014 18. Total Depth: MD 9050 19. Plug Back T.D.: MD 8979 20. Depth Bridge Plug Set: MD TVD 8943 TVD 8872 TVD Type Electric & Other Mechanical Logs Run (Submit copy of each) RADIAL CBL/GR/CCL/TEMP Was well cored? 22. **⊠** No Yes (Submit analysis) Was DST run? ▼ No Yes (Submit analysis) Yes (Submit analysis) Directional Survey? \square No 23. Casing and Liner Record (Report all strings set in well) No. of Sks. & Bottom Stage Cementer Slurry Vol. Hole Size Size/Grade Wt. (#/ft.) Cement Top* Amount Pulled (MD) (MD) Depth Type of Cement (BBL) 24.000 14.000 STL 36.7 0 11.000 8.625 J-55 28.0 24 2488 800 750 7.875 4.500 I-80 9025 1535 11.6 24 24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) 8453 25. Producing Intervals 26. Perforation Record Formation Top Bottom Perforated Interval Size No. Holes Perf. Status A) 5104 0.410 102 **OPEN** WASATCH 6774 5104 TO 6774 B) **MESAVERDE** 6832 8908 6832 TO 8908 0.410 210 **OPEN** C) D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc

Depth Interval

Amount and Type of Material PUMP 16,072 BBLS SLICKWATER AND 379,580 LBS 30/50 MESH SAND

28. Production - Interval A Oil Gravity Produced Date Tested Production BBL MCF BBL Corr. API Gravity 01/31/2014 02/09/2014 24 0.0 2139.0 FLOWS FROM WELL 0.0 Choke Tbg. Press Csg. 24 Hr. Oil Gas Water Gas:Oil Well Status MCF BBL Rate BBL 1254 Ratio Size Flwg. Press 20/64 1519.0 0 2139 0 **PGW** 28a. Production - Interval B Water Date First Test Hours Oil Gas Oil Gravity Gas Production Method MCF BBL BBL Corr. API Produced Date Tested Production Gravity Choke 24 Hr. Water Gas:Oil Well Status Tbg. Press Csg. Oil Gas Size Press BBL Ratio Flwg. Rate

(See Instructions and spaces for additional data on reverse side)
ELECTRONIC SUBMISSION #237077 VERIFIED BY THE BLM WELL INFORMATION SYSTEM ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

28b. Pro	duction - Inter	val C										
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	y	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well St	Well Status			
28c. Prod	duction - Inter	val D		<u> </u>		I						
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	y	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well St	tatus	•		
29. Dispo	osition of Gas	Sold, used	for fuel, vent	ed, etc.)		•		· ·				
	mary of Porou	s Zones (In	clude Aquife	rs):					31. For	rmation (Log) Mar	kers	
tests,	v all important , including dep recoveries.	zones of poth interval	orosity and co tested, cushic	ontents ther on used, tim	eof: Core e tool ope	d intervals an en, flowing ar	nd all drill-stem nd shut-in pressures					
Formation			Top Bottom Description			tions, Contents, etc.		Name			Top Meas. Deptl	
32 Addi	tional remarks	(include n	lugging proce	edure):					BIF MA WA	REEN RIVER RD'S NEST AHOGANY ASATCH ESAVERDE		1090 1540 2014 4474 6826
The surfa LTC perfo	first 200 ft. of ace hole was csg was run oration report	f the surfardrilled with from 5027 & final surfachments:	ce hole was h an 11 in. b 7 ft. to 9025 rvey.	drilled with	sg was ru	un from surfa	•		DST Re	port	4. Direction	nal Survey

Name (please print) KAY KELLY

Title SR. STAFF REGULATORY SPECIALIS

(Electronic Submission) Date <u>02/27/2014</u>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

					U:	S ROC	KIES RE	EGION			
					Opera	tion S	umma	ry Report			
Well: NBU 1022	2-3C1BS BL	UE						Spud Date: 9/2	20/2013		
					J 1022-03C PAD Rig Name No: SST 8/8, CAPSTAR 310/310						
					9/10/20	13			End Date: 11/25/2013		
					UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0						
Level)											
Date	Star	me t-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation		
9/20/2013	11:00		1.00	MIRU	01	Е	Р	64	RIG DOWN & PREPARE FOR TRUCKS		
	12:00	- 16:00	4.00	MIRU	01	A	P	64	PRE JOB SAFTY MEETING WITH RIG CREW, HOWCRAFT DRIVERS, STALLION CREW, CLEAN HARBORS CREW. MOVE RIG 1.1 MILES TO THE NBU 1022-3C1BS / MOVE IN & RIG UP CAMPS, SET MATTING BOARDS, PIPE RANGLER, SUB, DOG HOUSE, DERRICK, AND BACK YARD / HOWCROFT FIELD SERVICES HAD 4 TRUCKS, 1 PUSHER, 1 SAFETY MAN, AND 1 SWAMPER, 7 TOTAL HANDS / STALLION HAD 2 TRUCKS AND 3 SERVICE PICKUPS, 5 TOTAL HANDS.		
	16:00	- 18:00	2.00	MIRU	01	В	Р	64	RIG UP MUFFLER TANK AND CLOSED LOOP SYSTEM / RIG UP FLOOR & SET BHA ON PIPE RACKS / WELD UP CONDUCTOR PIPE AND NIPPLE UP ROTATING HEAD / HOOK UP FLOW LINE		
	18:00	- 18:30	0.50	DRLSUR	23		Р	64	PRESPUD SAFETY MEETING WITH RIG CREW, CLEAN HARBORS CREW, AND SCIENTIFIC CREW / REVIEW DIRECTIONAL PLANS WITH DIRECTIONAL DRILLERS		
	18:30	- 19:30	1.00	DRLSUR	09	Α	Р	64	PJSM, SLIP AND CUT 35' OF DRILLING LINE		
	19:30	- 20:00	0.50	DRLSUR	06	Α	Р		PICK UP 12 1/4" BIT AND 8" MUD MOTOR & TRIP IN HOLE		
	20:00	- 21:00	1.00	DRLSUR	80	Α	Z	64	***FAILURE: REPLACE LIGHT ON DRAWORKS AND LIGHT IN DERRICK		
	21:00	- 23:00	2.00	DRLSUR	02	В	P	64	DRILL 12 1/4 SURFACE HOLE F/ 49' TO 200', 151' @ 75.5 FPH NOTE: ACTED LIKE JUNK ON BOTTOM WHEN DRILLING OUT OF CONDUCTOR PIPE - ROUGH & JUMPING - WORKED PIPE AND IT SMOOTHED OUT WOB = 8 TO 12K ROTORY RPM = 65 / MUD MOTOR RPM = 101 / TOTAL = 166 PUMPING 594 GPM @ 200 SPM STAND PIPE PRESSURE ON/OFF = 800/600 TORQUE ON/OFF = 2000/740 PU = 30 / SO = 28 / ROT = 28 PEAK ON LINE ARCHER OFF LINE MUD WT 8.4		
	23.00	00.00	0.50	DB: 0: :=	2.5		_	0.15	NO HOLE ISSUES		
	23:30	- 23:30 - 0:00	0.50 0.50	DRLSUR DRLSUR	06 06	A A	P P	215 215	TRIP OUT OF HOLE / LAY DOWN 12 1/4" BIT. PICK UP 11" BIT & DIRECTIONAL TOOLS, SCRIBE		
9/21/2013	0:00	- 1:30	1.50	DRLSUR	06	Α	Р	215	MOTOR, AND TRIP IN HOLE. PICK UP 11" BIT & DIRECTIONAL TOOLS, SCRIBE MOTOR, AND TRIP IN HOLE.		

API Well Number: 43047529240000 US ROCKIES REGION **Operation Summary Report** Spud Date: 9/20/2013 Well: NBU 1022-3C1BS BLUE Project: UTAH-UINTAH Site: NBU 1022-03C PAD Rig Name No: SST 8/8, CAPSTAR 310/310 **Event: DRILLING** End Date: 11/25/2013 Start Date: 9/10/2013 UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0 Active Datum: RKB @5,095.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 1:30 - 3:00 1.50 DRLSUR 02 В Ρ 215 DRILL 11" SURFACE HOLE F/ 200' TO 347', 147' @ 98 FPH WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 101 / **TOTAL** = 161 PUMPING 594 GPM @ 200 SPM STAND PIPE PRESSURE ON/OFF = 900/650 TORQUE ON/OFF = 2,530/450 PU = 50 / SO = 40 / ROT = 44 PEAK ON LINE ARCHER OFF LINE MUD WT 8.4 SLID 40' = 29.85% 0.34' ABOVE & 0.26' LEFT OF THE LINE NO HOLE ISSUES 3:00 - 3:30 0.50 **DRLSUR** 80 Ζ 362 *** FAILURE: WORK ON RIG AIR SYSTEM AND AIR SLIP CONTROL 3:30 - 4:00 0.50 **DRLSUR** 362 02 В DRILL 11" SURFACE HOLE F/ 347' TO 377', 30' @ 60 FPH WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 101 / **TOTAL = 161** PUMPING 594 GPM @ 200 SPM STAND PIPE PRESSURE ON/OFF = 900/650 TORQUE ON/OFF = 2,530/450 PU = 50 / SO = 42 / ROT = 45 PEAK ON LINE ARCHER OFF LINE **MUD WT 8.4** $SLID_{0}' = 0\%$ 0.64' ABOVE & 0.17' LEFT OF THE LINE NO HOLE ISSUES 4:00 - 4:30 0.50 DRLSUR 392 CHANGE ROTATING HEAD RUBBERS FROM 6" TO 4" 07 C 4:30 - 6:00 1.50 **DRLSUR** 02 392 DRILL 11" SURFACE HOLE F/ 377' TO 600', 223" @ 148.6 FPH WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 101 / **TOTAL = 161** PUMPING 594 GPM @ 200 SPM STAND PIPE PRESSURE ON/OFF = 1,060/810 TORQUE ON/OFF = 2,530/450 PU = 52 / SO = 44 / ROT = 46 PEAK ON LINE ARCHER OFF LINE MUD WT 8.4 SLID 20' = 10.70% 1.18' ABOVE & 0.29' RIGHT OF THE LINE NO HOLE ISSUES

API Well Number: 43047529240000 **US ROCKIES REGION Operation Summary Report** Well: NBU 1022-3C1BS BLUE Spud Date: 9/20/2013 Project: UTAH-UINTAH Site: NBU 1022-03C PAD Rig Name No: SST 8/8, CAPSTAR 310/310 **Event: DRILLING** End Date: 11/25/2013 Start Date: 9/10/2013 UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0 Active Datum: RKB @5,095.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 6:00 - 13:00 7.00 DRLSUR 02 Ρ 615 В DRILL 11" SURFACE HOLE F/ 600' TO 1520', 920' @ 131.4 FPH WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 101 / **TOTAL = 161** PUMPING 594 GPM @ 200 SPM STAND PIPE PRESSURE ON/OFF = 1,060/810 TORQUE ON/OFF = 2,850/8100 PU = 61 / SO = 55 / ROT = 58 PEAK ON LINE ARCHER OFF LINE MUD WT 8.4 SLID 151' = 22.97% 8.87' ABOVE & 0.33' RIGHT OF THE LINE NO HOLE ISSUES 13:00 - 13:30 0.50 **DRLSUR** 07 1535 **RIG SERVICE** 13:30 - 18:00 4.50 DRLSUR 02 В Р 1535 DRILL 11" SURFACE HOLE F/ 1520' TO 1911', 391' @ WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 88 / TOTAL PUMPING 445 GPM @ 140 SPM STAND PIPE PRESSURE ON/OFF = 850/600 TORQUE ON/OFF = 2,850/1,210 PU = 61 / SO = 55 / ROT = 58 PEAK ON LINE ARCHER ON LINE @ 1,569' WITH 350 CFM MUD WT 8.4 SLID 186' = 50.41% 2.26' ABOVE & 4.74' RIGHT OF THE LINE HOLE ISSUES LOST CIRCULATION @ 1,569 18:00 - 21:00 3.00 **DRLSUR** 1926 02 В DRILL 11" SURFACE HOLE F/ 1,911' TO 2,019', 108' @ 36 FPH WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 88 / TOTAL PUMPING 445 GPM @ 140 SPM STAND PIPE PRESSURE ON/OFF = 850/600 TORQUE ON/OFF = 2,930/1,220 PU = 83 / SO = 68 / ROT = 75 PEAK ON LINE ARCHER ON LINE WITH 350 CFM **MUD WT 8.4** SLID 89' = 80.0% 2.26' ABOVE & 4.74' RIGHT OF THE LINE HOLE ISSUES LOST CIRCULATION @ 1,569 21:00 - 21:30 Ζ 0.50 DRLSUR 08 2034 *** FAILURE: PULL 5 JOINTS / REPLACE BULL PLUG IN TOP DRIVE GOOSE NECK / RUN IN HOLE 5 JOINTS 21:30 - 0:00 2.50 **DRLSUR** Ζ 2034 80 В *** FALURE: WORK ON AIR PACKAGE / PULL 10 JOINTS / REPLACE VALVES IN BOOSTER ON AIR PACKAGE / RUN IN HOLE 10 JOINTS

API Well Number: 43047529240000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3C1BS BLUE Spud Date: 9/20/2013 Project: UTAH-UINTAH Site: NBU 1022-03C PAD Rig Name No: SST 8/8, CAPSTAR 310/310 **Event: DRILLING** End Date: 11/25/2013 Start Date: 9/10/2013 UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0 Active Datum: RKB @5,095.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 9/22/2013 0:00 - 2:30 2.50 DRLSUR 02 Ρ 2034 В DRILL 11" SURFACE HOLE F/ 2.019' TO 2.133'. 114' @ 45.6 FPH WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 88 / TOTAL = 148PUMPING 445 GPM @ 140 SPM STAND PIPE PRESSURE ON/OFF = 850/600 TORQUE ON/OFF = 2,990/1,300 PU = 88 / SO = 68 / ROT = 78 PEAK ON LINE ARCHER ON LINE WITH 400 CFM MUD WT 8.4 SLID 62' = 68.97% 0.59' ABOVE & 0.59' LEFT OF THE LINE HOLE ISSUES LOST CIRCULATION @ 1,569 2:30 - 8:30 6.00 DRLSUR Ζ 2128 08 TRIP OUT 25 JOINTS TO WORK ON AIR PACKAGE -CHANGED OUT AIR PACKAGE / BREAK CIRCULATION TO TEST NEW AIR PAC / TRIP IN HOLE 8:30 - 14:30 6.00 **DRLSUR** 02 В Ρ 2128 DRILL 11" SURFACE HOLE F/ 2,133' TO 2,500', 367' @ 61.2 FPH WOB = 15 TO 20K ROTORY RPM = 60 / MUD MOTOR RPM = 85 / TOTAL PUMPING 445 GPM @ 150 SPM STAND PIPE PRESSURE ON/OFF = 900/600 TORQUE ON/OFF = 3,050/1,500 PU = 92 / SO = 72 / ROT = 78 PEAK ON LINE ARCHER ON LINE WITH 250 CFM MUD WT 8 4 SLID 62' = 68 97% 0.59' ABOVE & 0.59' LEFT OF THE LINE HOLE ISSUES LOST CIRCULATION @ 1,569 14:30 - 16:30 2515 2 00 **DRLSUR** 05 C CIRCULATE AND CONDITION HOLE, WHILE RECIPRICATING PIPE / PUMPING 445 GPM @ 150 SPM WITH 250 CFM AIR / RETURNS CLEAN COMING OVER SHAKER / 4 - 400 BBL UPRIGHTS FULL / 2 -400 BBL UPRIGHTS EMPTY / SPOT 130 BBL 10.5 # MUD ON BOTTOM 16:30 - 18:00 1.50 Р 2515 **DRLSUR** 06 D LAY DOWN DRILL PIPE & BOTTOM HOLE ASSEMBLY 18:00 - 19:00 1.00 DRLSUR 80 Ζ 2515 ***FAILURE: REPAIR BREAKOUT TONG CYLINDER Α 19:00 - 20:30 1.50 **DRLSUR** 06 D Ρ 2515 LAY DOWN DRILL PIPE & BOTTOM HOLE ASSEMBLY 20:30 - 22:30 2 00 C 2515 **CSGSUR** 12 PREJOB SAFETY MEETING WITH RIG CREW. RAN 56 JTS (2,475.37') OF 8 5/8", 28#, J-55, LT&C CASING WITH CTE FLOAT GUIDE SHOE AND BAFFLE PLATE LOCATED 1 JOINT ABOVE THE SHOE. 5 CENTRALIZERS SPACED 10' ABOVE THE SHOE, 2ND & 3RD COLLARS, AND EVERY THIRD COLLAR TO 2,116'. LANDED CASING SHOE AT 2,473'. BAFFLE PLATE @ 2,428' 22:30 - 23:00 0.50 **CSGSUR** 05 D Р 2515 CIRCULATE CASING WITH RIG PUMP

	ell Number	1501				KIES RI	EGION	
				Opera	tion S	Summa	ry Report	
Vell: NBU 1022	2-3C1BS BLUE						Spud Date: 9/2	20/2013
Project: UTAH-L	JINTAH		Site: NBU	1022-03	C PAD			Rig Name No: SST 8/8, CAPSTAR 310/310
Event: DRILLING	G		Start Date	e: 9/10/20)13			End Date: 11/25/2013
Active Datum: R Level)	RKB @5,095.00usft (a	bove Mean S	ea	UWI: NE	E/NW/0/1	0/S/22/E/	3/0/0/26/PM/N/8 ⁻	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	23:00 - 0:00	1.00	CSGSUR	12	E	P	2515	PREJOB SAFETY MEETING WITH PRO PETRO CEMENTERS & RIG CREW. RAN 200' OF 1" PIPE DOWN BACKSIDE OF CASING TESTED LINES TO 2500 PSI PUMPED 144 BBLS FRESH WATER CLEARING SHOE MIXED AND PUMPED 20 BBL GELLED WATER FLUSH AHEAD OF CEMENT MIXED AND PUMPED 300 SX OF PREMIUM CEMENT WITH 2% CACL2 & 1/4 LB/SX FLOCELE. 61.4 BBL OF SLURRY MIXED @ 15.8 PPG WITH YIELD OF 1.15 CF/SX. DROP PLUG ON FLY. START DISPLACEMENT
9/23/2013	0:00 - 1:00	1.00	CSGSUR	12	E	P	2515	CONTINUE CEMENTING SURFACE CASING DISPLACE WIITH 151.5 BBL FRESH WATER. NO RETURNS THROUGH OUT DISPLACEMENT. FINAL LIFT OF 260 PSI @ 4.5 BBL/MINUTE. BUMP PLUG WITH 590 PSI. HELD 590 PSI FOR 5 MINUTES. CHECK FLOAT. FLOAT HELD. TOP JOB # 1: PUMP CEMENT DOWN 1" PIPE WITH 150 SX PREMIUM CEMENT WITH 4% CACL2, 2% GR-3, & 1/4 LB/SX FLOCELE. 30.7 BBL OF SLURRY MIXED @ 15.8 PPG WITH YIELD OF 1.15 CF/SX. NO RETURNS RELEASE RIG @ 01:00 WAIT ON CEMENT 2 HRS TOP JOB # 2: CEMENT DOWN BACK SIDE WITH 150 SX PREMIUM CEMENT WITH 4% CACL2, 2% GR-3, & 1/4 LB/SX FLOCELE. 30.7 BBL OF SLURRY MIXED @ 15.8 PPG WITH YIELD OF 1.15 CF/SX. NO RETURNS
11/21/2013	6:00 - 7:00 7:00 - 8:00 8:00 - 8:30	1.00 1.00 0.50	MIRU MIRU MIRU	01 01 01	E C B	P P	2515 2515 2515	WAIT ON CEMENT 2 HRS TOP JOB # 3: CEMENT DOWN BACK SIDE WITH 200 SX PREMIUM CEMENT WITH 4% CACL2, 2% GR-3, & 1/4 LB/SX FLOCELE. 40.9 BBL OF SLURRY MIXED @ 15.8 PPG WITH YIELD OF 1.15 CF/SX. CEMENT TO SURFACE. HOLE STOOD FULL. CEMENT JOB DONE @07:00 PREPARE TO SKID SKID RIG PREPARE TO DRILL
	8:30 - 9:30	0.00	WIII	01			2010	THE THE TO DIVILL

API Well Number: 43047529240000 US ROCKIES REGION **Operation Summary Report** Spud Date: 9/20/2013 Well: NBU 1022-3C1BS BLUE Project: UTAH-UINTAH Site: NBU 1022-03C PAD Rig Name No: SST 8/8, CAPSTAR 310/310 Event: DRILLING Start Date: 9/10/2013 End Date: 11/25/2013 UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0 Active Datum: RKB @5,095.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End Code (hr) (usft) 9:30 - 13:30 4.00 **PRPSPD** 15 Ρ 2515 Α HELD A SAFETY MEETING WITH A-1 TESTER. FILL THE TRUCK WITH WATER, RIGGED UP TESTER TESTING CASING AND CHOKE TO 1500 PSI FOR 30 MINUTES. TEST ANNULLAR TO 2500 PSI FOR 10 MIN AND 250 PSI FOR 5 MINUTES. TEST I-BOP VALVE, FLOOR VALVE, DART VALVE, PIPE AND BLIND RAMS, INSIDE AND OUTSIDE KILL LINE VALVES INSIDE OUTSIDE CHOKE LINE VALVE, HCR VALVE, CHOKE LINE, CHOKE MANIFOLD VALVES TO 5000 PSI FOR 10 MINUTES AND 250 PSI FOR 5 MINUTES. 13:30 - 14:00 0.50 PRPSPD 2515 14 В SET WEAR BUSHING 14:00 - 16:30 Ρ 2515 2.50 **PRPSPD** 06 PICK UP MOTOR / MAKE UP BIT / SCRIBE MOTOR / PICK UP MWD TOOL / TRIP IN HOLE T/2065 16:30 - 17:00 0.50 **PRPSPD** 09 Ρ 2515 SLIP AND CUT DRILL LINE 17:00 - 17:30 0.50 PRPSPD 07 Р 2515 **RIG SERVICE** Α 17:30 - 18:30 1.00 PRPSPD 06 Α Ρ 2515 WASH F/2065 - 2400 18:30 - 20:00 1.50 **DRLPRC** 02 Ρ 2515 DRILL SHOE TRACK / WOB-10 SPM-80 GPM-330 **RPM-35**

2/20/2014 7:52:42AM 6

						KIES RI Summa	GION Report	
/ell: NBU 1022	2-3C1BS BLUE						Spud Date: 9/2	20/2013
oject: UTAH-l	JINTAH		Site: NBL	J 1022-03	C PAD			Rig Name No: SST 8/8, CAPSTAR 310/310
ent: DRILLIN	G		Start Dat	e: 9/10/20)13			End Date: 11/25/2013
tive Datum: F	RKB @5,095.00usft (al	oove Mean S	ea	UWI: NE	E/NW/0/1	0/S/22/E/	3/0/0/26/PM/N/8 ²	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	20:00 - 0:00	4.00	DRLPRC	02	D	P	2515	DRILL SLIDE 2515-2859' (344' @ 86' /HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 111 STROKES PER MINUTE 130 GALLONS PER MINUTE 586 OFF/ON PSI 1100/1400 DIFFERENTIAL 300 TORQUE HIGH/LOW 5000/9000 OFF BOTTOM TORQUE 4000 STRING WEIGHT UP/DOWN/ROT 95/70/90 DRAG 5 K. BOS DEWATER AS NEEDED WT 8.7 VIS 30. ////// DRILLING WITH DIRTY WATER //// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 21 BBL. FLUID FOR HOLE VOLUME 0 BARRELS LOSSES @ 0 BBL/HR NO FLARE
								Position @ Time of Report / REF Proposal 2013/11/21 Below 10.29 Left 1.25' 2,859' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 20:00 To 0:00 4:00 Actual On Bottom Drilling Time 3.08 4.00
								Total Footage Drilled From 2515' To 2859' 344' Total Footage Drilled Rotating 237 Percent of Footage Rotated 68.90% Total Footage Drilled Sliding 107 Percent of Footage Sliding 31.10% Hours
								Total Time Rotate Drilling 1.58 Percent of Time Rotated 51.30% Total Time Slide Drilling 1.50 Percent of Time Sliding 48.70% Connection / Ream / Rig Time / Circulating 0.92 Percent Non-Drilling Time 23.00%
								Last Survey MD: 2777' Inc 19.8 Azm 34.8 TVD 2716.62' Projection to Bit from Last Survey MD: 2859' Below 10.29' Left 1.25' Proposal

					KIES RE Summa	ry Report	
ell: NBU 1022-3C1BS BLUE			Ороло			Spud Date: 9/2	20/2013
oject: UTAH-UINTAH		Site: NBL	J 1022-03	BC PAD		Opua Bate. 5/2	Rig Name No: SST 8/8, CAPSTAR 310/310
ent: DRILLING		Start Date			T		End Date: 11/25/2013
tive Datum: RKB @5,095.00us	ft (above Mean Se		1		_l 0/S/22/E/3	8/0/0/26/PM/N/8 ⁻	10/W/0/1682/0/0
vel)	ii (aboro iiioaii oi						
Date Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
Start-End 11/22/2013 0:00 - 6:00		DRLPRC	02	D D	P	(usft) 2859	DRILL SLIDE 2859-3633 (774' @ 129' /HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 111 STROKES PER MINUTE 130 GALLONS PER MINUTE 586 OFF/ON PSI 1100/1400 DIFFERENTIAL 300 TORQUE HIGH/LOW 5000/9000 OFF BOTTOM TORQUE 4000 STRING WEIGHT UP/DOWN/ROT 95/70/90 DRAG 5 K. BOS DEWATER AS NEEDED WT 8.7 VIS 30. ///// DRILLING WITH DIRTY WATER //// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 48 BBL. FLUID FOR HOLE VOLUME 50 BARRELS LOSSES @ 8 BBL/HR NO FLARE Bit Position @ Time of Report / REF Proposal 2013/11/22 Above 1.26 Right 3.37' 3,494' Bit Position Update Start / Stop Times From 0:00 To 5:00 5:00 Actual On Bottom Drilling Time 3.92 5.00 Total Footage Drilled From 2859' To 3494' 635' Total Footage Drilled Rotating 499 Percent of Footage Rotated 78.58% Total Footage Drilled Sliding 136 Percent of Footage Sliding 21.42% Hours Total Time Rotate Drilling 1.50 Percent of Time Sliding 38.27% Connection / Ream / Rig Time / Circulating 1.08

						KIES RI Summa	EGION Iry Report	
Well: NBU 1022	2-3C1BS BLUE						Spud Date: 9/2	20/2013
Project: UTAH-l	JINTAH		Site: NBL	J 1022-03	C PAD			Rig Name No: SST 8/8, CAPSTAR 310/310
Event: DRILLIN	G		Start Date	9/10/20 ع- 9/10/20)13			End Date: 11/25/2013
	RKB @5,095.00usft (at	oove Mean S	-	1		0/S/22/E/	3/0/0/26/PM/N/8 ²	10/W/0/1682/0/0
.evel)								
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 14:00	8.00	DRLPRC	02	D	P	3633	DRILL SLIDE 3633-4923 (1290' @ 161.25' /HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 114 STROKES PER MINUTE 130 GALLONS PER MINUTE 544 OFF/ON PSI 1400/1750 DIFFERENTIAL 350 TORQUE HIGH/LOW 12000/9000 OFF BOTTOM TORQUE 6000 STRING WEIGHT UP/DOWN/ROT 160/90/120 DRAG 40 K. BOS DEWATER AS NEEDED WT 8.7 VIS 30. ////// DRILLING WITH DIRTY WATER ///// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 80 BBL. FLUID FOR HOLE VOLUME 75 BARRELS LOSSES @ 9 BBL/HR NO FLARE Bit Position @ Time of Report / REF PBHL 2013/11/22 North 9.17' West 7.20' 4,923' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 5:00 To 14:00 9:00 Actual On Bottom Drilling Time 7.66 9.00 Total Footage Drilled From 3494' To 4923' 1429' Total Footage Drilled Rotating 1230 Percent of Footage Rotated 86.07% Total Footage Drilled Sliding 199 Percent of Footage Sliding 13.93% Hours Total Time Rotate Drilling 5.25 Percent of Time Rotated 68.54% Total Time Slide Drilling 2.42 Percent of Time Sliding 31.59% Connection / Ream / Rig Time / Circulating 1.34 Percent Non-Drilling Time 14.89% Last Survey MD: 4873' Inc 1.1 Azm 242.1 TVD 4766.02' Projection to Bit from Last Survey
	14:00 - 14:30	0.50	DRLPRC	07	Α	Р	4923	MD: 4923' North 9.17' West 7.20' PBHL RIG SERVICE

				U	S ROC	KIES RE	GION	
				Opera	tion S	umma	ry Report	
ell: NBU 1022-	-3C1BS BLUE						Spud Date: 9/2	20/2013
oject: UTAH-U	INTAH		Site: NBU	J 1022-03	C PAD			Rig Name No: SST 8/8, CAPSTAR 310/310
vent: DRILLING	3		Start Date	e: 9/10/20)13			End Date: 11/25/2013
ctive Datum: Ri	KB @5,095.00usft (al	oove Mean S	ea	UWI: NE	E/NW/0/1	0/S/22/E/3	3/0/0/26/PM/N/8 ²	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	14:30 - 0:00	9.50	DRLPRC	02	В	P	4923	DRILL SLIDE 4923-6065 (1142' @ 120' /HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 123 STROKES PER MINUTE 140 GALLONS PER MINUTE 586 OFF/ON PSI 1700/1900 DIFFERENTIAL 200 TORQUE HIGH/LOW 12000/10000 OFF BOTTOM TORQUE 10000 STRING WEIGHT UP/DOWN/ROT 165/120/135 DRAG 30 K. BOS DEWATER AS NEEDED WT 8.7 VIS 30. ////// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 71 BBL. FLUID FOR HOLE VOLUME 67 BARRELS LOSSES @ 7 BBL/HR NO FLARE
								Bit Position @ Time of Report / REF PBHL 2013/11/22 North 13.36' West 10.04' 6,065' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 14:00 To
								0:00 10:00 Actual On Bottom Drilling Time 8.34 10.00 Total Footage Drilled From 4923' To 6065' 1142' Total Footage Drilled Rotating 1107 Percent of Footage Rotated 96.94% Total Footage Drilled Sliding 35 Percent of Footage Sliding 3.06% Hours
								Total Time Rotate Drilling 7.83 Percent of Time Rotated 93.88% Total Time Slide Drilling 0.50 Percent of Time Sliding 6.00% Connection / Ream / Rig Time / Circulating 1.66 Percent Non-Drilling Time 16.60% Last Survey MD: 5920' Inc 0.4 Azm 137.3 TVD 6002.92' Projection to Bit from Last Survey

					KIES RI	EGION Iry Report	
			Opera		umme		200/2040
ell: NBU 1022-3C1BS BLUE		Cita, NDI	1 4000 00	O DAD		Spud Date: 9/2	
oject: UTAH-UINTAH		Site: NBC	J 1022-03	OC PAD	1		Rig Name No: SST 8/8, CAPSTAR 310/310
vent: DRILLING		Start Dat	e: 9/10/20				End Date: 11/25/2013
ctive Datum: RKB @5,095.00usft (evel)	above Mean S	ea	UWI: NI	E/NW/0/1	0/S/22/E/	3/0/0/26/PM/N/8 ²	10/W/0/1682/0/0
Date Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/23/2013 0:00 - 6:00	6.00	DRLPRV	02	B	P	6065	DRILL SLIDE 6065-6500 (435' @ 72 ' /HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 123 STROKES PER MINUTE 140 GALLONS PER MINUTE 586 OFF/ON PSI 1700/1900 DIFFERENTIAL 200 TORQUE HIGH/LOW 12000/10000 OFF BOTTOM TORQUE 10000 STRING WEIGHT UP/DOWN/ROT 165/120/135 DRAG 30 K. BOS DEWATER AS NEEDED WT 8.7 VIS 30. ///// DRILLING WITH DIRTY WATER ///// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 23 BBL. FLUID FOR HOLE VOLUME 48 BARRELS LOSSES @ 8 BBL/HR NO FLARE Bit Position @ Time of Report / REF PBHL 2013/11/23 North 11.48' West 8.79' 6,446' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 0:00 To 5:00 5:00 Actual On Bottom Drilling Time 4.42 5.00 Total Footage Drilled From 6065' To 6446' 381' Total Footage Drilled Rotating 361 Percent of Footage Rotated 94.75% Total Footage Drilled Sliding 20 Percent of Footage Sliding 5.25% Hours Total Time Rotate Drilling 3.83 Percent of Time Rotated 86.65% Total Time Slide Drilling 0.58 Percent of Time Sliding 13.12% Connection / Ream / Rig Time / Circulating 0.58

				Opera	tion S	umma	ry Report	
NDLL 1022	204B6 BLUE						Spud Date: 9/2	20/2013
	3C1BS BLUE		Cito: NDI	1 1022 02	OC DAD		Spud Date. 9/2	
oject: UTAH-L			Site. NBC	J 1022-03	OC PAD	1		Rig Name No: SST 8/8, CAPSTAR 310/310
ent: DRILLIN			Start Date	1				End Date: 11/25/2013
tive Datum: R vel)	KB @5,095.00usft (al	oove Mean S	ea	UWI: N	=/NW/0/1	0/S/22/E/3	3/0/0/26/PM/N/8 ²	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	Start-End 6:00 - 15:00	9.00	DRLPRV	02	B B	P	(usft) 6500	DRILL SLIDE 6500-7208 (708' @ 78 ' /HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 123 STROKES PER MINUTE 140 GALLONS PER MINUTE 586 OFF/ON PSI 1700/1900 DIFFERENTIAL 200 TORQUE HIGH/LOW 12000/10000 OFF BOTTOM TORQUE 10000 STRING WEIGHT UP/DOWN/ROT 165/120/135 DRAG 30 K. BOS DEWATER AS NEEDED WT 8.7 VIS 30. ///// DRILLING WITH DIRTY WATER //// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 44 BBL. FLUID FOR HOLE VOLUME 81 BARRELS LOSSES @ 9 BBL/HR NO FLARE Bit Position @ Time of Report / REF PBHL 2013/11/23 North 13.89' West 12.59' 7,208' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 5:00 To 15:00 10:00 Actual On Bottom Drilling Time 9.33 10.00 Total Footage Drilled From 6446' To 7208' 762' Total Footage Drilled Rotating 706 Percent of Footage Rotated 92.65% Total Footage Drilled Sliding 56 Percent of Footage Sliding 7.35% Hours Total Time Rotate Drilling 1.34 Percent of Time Rotated 85.74% Total Time Rotate Drilling 1.34 Percent of Time Sliding 14.36% Connection / Ream / Rig Time / Circulating 0.67 Percent Non-Drilling Time 6.70% Last Survey MD: 7158' Inc 0.0 Azm 100.7 TVD 7050.89' Projection to Bit from Last Survey

				U	S ROC	KIES RI	EGION	
				Opera	tion S	umma	ry Report	
ell: NBU 1022-3C1B	S BLUE						Spud Date: 9/2	20/2013
oject: UTAH-UINTA	1		Site: NBL	1022-03	C PAD			Rig Name No: SST 8/8, CAPSTAR 310/310
vent: DRILLING			Start Date	e: 9/10/20)13			End Date: 11/25/2013
ctive Datum: RKB @	5,095.00usft (al	oove Mean S	ea	UWI: NE	E/NW/0/1	0/S/22/E/	3/0/0/26/PM/N/8 ⁻	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
15:3	30 - 0:00	8.50	DRLPRV	02	В	P	7208	DRILL SLIDE 7208-7811 (603' @ 71 '/HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 105 STROKES PER MINUTE 120 GALLONS PER MINUTE 502 OFF/ON PSI 1700/1900 DIFFERENTIAL 200 TORQUE HIGH/LOW 16000/14000 OFF BOTTOM TORQUE 14000 STRING WEIGHT UP/DOWN/ROT 218/140/157 DRAG 58 K. BOS DEWATER AS NEEDED WT 8.7 VIS 30. ////// DRILLING WITH DIRTY WATER ///// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 37 BBL. FLUID FOR HOLE VOLUME 60 BARRELS LOSSES @ 7 BBL/HR NO FLARE
								Bit Position @ Time of Report / REF PBHL 2013/11/23 North 13.08' West 10.32' 7,811' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 15:00 To 0:00 9:00 Actual On Bottom Drilling Time 8.00 9.00 Total Footage Drilled From 7208' To 7811' 603' Total Footage Drilled Rotating 585 Percent of Footage Rotated 97.01% Total Footage Drilled Sliding 38 Percent of Footage Sliding 6.30% Hours Total Time Rotate Drilling 6.42 Percent of Time Rotated 80.25% Total Time Slide Drilling 1.58 Percent of Time Sliding 19.75% Connection / Ream / Rig Time / Circulating 1.00

						KIES RI		
				Opera	ition S	umma	ry Report	
Vell: NBU 1022-	-3C1BS BLUE		1				Spud Date: 9/2	20/2013
roject: UTAH-U	INTAH		Site: NBL	J 1022-03	BC PAD			Rig Name No: SST 8/8, CAPSTAR 310/310
vent: DRILLING	3		Start Dat	e: 9/10/20)13			End Date: 11/25/2013
	KB @5,095.00usft (ab	ove Mean S	ea	UWI: NE	E/NW/0/1	0/S/22/E/	3/0/0/26/PM/N/8 ⁻	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/24/2013	0:00 - 6:00	6.00	DRLPRV	02	В	P	7811	DRILL SLIDE 7811-8328 (517' @ 86'/HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65, MUD MOTOR RPM 105 STROKES PER MINUTE 120 GALLONS PER MINUTE 502 OFF/ON PSI 1700/1900 DIFFERENTIAL 200 TORQUE HIGH/LOW 16000/14000 OFF BOTTOM TORQUE 14000 STRING WEIGHT UP/DOWN/ROT 218/140/157 DRAG 58 K. BOS DEWATER AS NEEDED WT 9.7 VIS 33. ////// DRILLING WITH DIRTY WATER ///// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 32 BBL. FLUID FOR HOLE VOLUME 60 BARRELS LOSSES @ 10 BBL/HR NO FLARE
								Bit Position @ Time of Report / REF PBHL 2013/11/24 North 7.29' West 9.52' 8,255' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 0:00 To 5:00 5:00 Actual On Bottom Drilling Time 4.58 5.00 Total Footage Drilled From 7811' To 8255' 444' Total Footage Drilled Rotating 444 Percent of Footage Rotated 100.00% Total Footage Drilled Sliding 0 Percent of Footage Sliding 0.00% Hours Total Time Rotate Drilling 4.58 Percent of Time Rotated 100.00% Total Time Slide Drilling 0.00 Percent of Time Sliding 0.00%
								Connection / Ream / Rig Time / Circulating 0.42 Percent Non-Drilling Time 8.40% Last Survey MD: 8110' Inc 1.1 Azm 165.5 TVD 8002.83' Projection to Bit from Last Survey MD: 8255' North 7.29' West 9.52' PBHL

API Well Number: 43047529240000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3C1BS BLUE Spud Date: 9/20/2013 Project: UTAH-UINTAH Site: NBU 1022-03C PAD Rig Name No: SST 8/8, CAPSTAR 310/310 **Event: DRILLING** End Date: 11/25/2013 Start Date: 9/10/2013 UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0 Active Datum: RKB @5,095.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD From Operation Start-End Code (usft) (hr) 6:00 - 16:30 10.50 **DRLPRV** 02 Ρ 8328 В DRILL SLIDE 8328-9050 (722' @ 86'/HR) WEIGHT ON BIT 18-20 K. AVERAGE WEIGHT ON BIT 20K ROTARY RPM 65. MUD MOTOR RPM 90 STROKES PER MINUTE 100 **GALLONS PER MINUTE** 420 OFF/ON PSI 2200/1800 DIFFERENTIAL TORQUE HIGH/LOW 17000/15000 OFF BOTTOM TORQUE 15000 STRING WEIGHT UP/DOWN/ROT 235/125/170 DRAG 65 K. **BOS DEWATER AS NEEDED** WT 11.5 VIS 33. ///// DRILLING WITH DIRTY WATER ///// PUMP LCM & HIGH VIS SWEEPS TO HELP WITH LOSSES & HOLE CLEANING. USED 45 BBL. FLUID FOR HOLE VOLUME 60 BARRELS LOSSES @ 10 BBL/HR NO FLARE Bit Position @ Time of Report / REF PBHL 2013/11/24 South 17.78' East 10.71' 9,050' Start Time End Time Hours / Minutes Bit Position Update Start / Stop Times From 5:00 To 16:30 11:30 Actual On Bottom Drilling Time 10.50 11.50 Total Footage Drilled From 8255' To 9050' 795' Total Footage Drilled Rotating 795 Percent of Footage Rotated 100.00% Total Footage Drilled Sliding 0 Percent of Footage Sliding 0.00% Hours Total Time Rotate Drilling 10.50 Percent of Time Rotated 100.00% Total Time Slide Drilling 0.00 Percent of Time Sliding Connection / Ream / Rig Time / Circulating 1.00 Percent Non-Drilling Time 8.70% Last Survey MD: 9000' Inc 2.1 Azm 136.2 TVD 8892.2' Projection to Bit from Last Survey MD: 9050' South 17.78' East 10.71' PBHL 16:30 - 21:30 5.00 **DRLPRV** F Ρ 9050 05 CIRCULATE TD SWEEP / CHECK FLOW / WELL FLOWING / RAISE MUD WT. T/11.9 21:30 - 0:00 **DRLPRV** 9050 2.50 06 Ε Р MAKE 10 STAND TRIP / CHECK FLOW / TRIP OUT OF HOLF T/ 4900 FT 11/25/2013 0:00 - 0:30 0.50 **DRLPRV** 06 Ρ 9050 TRIP OUT OF HOLET/ 4900 FT / WELL BORE WAS TAKING EXCESIVE VOLUME TO KEEP THE HOLE FULL / @ 4900 FT UNABLE TO KEEP HOLE FULL DUE TO LOST RETURNS - 2:30 2.00 DRLPRV Х 9050 ATTEMPT TO ESTABLISH CIRCULATION THROUGH 05 F DRILL PIPE W/ 45 SPM & FILLING BACK SIDE WITH TRIP TANK PUMP/ LOST 200BBLS

API Well Number: 43047529240000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3C1BS BLUE Spud Date: 9/20/2013 Project: UTAH-UINTAH Site: NBU 1022-03C PAD Rig Name No: SST 8/8, CAPSTAR 310/310 **Event: DRILLING** End Date: 11/25/2013 Start Date: 9/10/2013 UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0 Active Datum: RKB @5,095.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 2:30 - 6:30 4.00 **DRLPRV** 05 Χ 9050 Α BUILD VOLUME IN PREMIX TANK / RAISE MUD WT. & LCM CONTENT TO 12% LCM / ESTABLISHED FULL RETURNS / BUILD HEAVY PILL F/ DRY LOB RECIEVED 500 BBLS 11.5 MUD F/ MUD PLANT 6:30 - 9:00 2.50 **CSGPRO** 06 Α Р 9050 TRIP OUT OF HOLE / BREAK OFF BIT / LAY DOWN MUD MOTOR / 9:00 - 9:30 **CSGPRO** 9050 0.50 Р RETRIEVE WEAR BUSHING 14 В 9:30 - 10:30 1.00 **CSGPRO** 12 Α Ρ 9050 RIG UP KIMZEY CASING CREW & LAY DOWN **TRUCK** 10:30 - 18:00 7.50 **CSGPRO** 12 С Р 9050 HELD SAFETY MEETING RAN 205 TOTAL JTS. OF CASING (90 JOINTS OF 4.5"/11.6# / I-80/ LTC + 1 MARKER) + (113 JTS. OF 4.5"/ 11.6#/ I-80/ DQX) + (1-DQX CROSS OVER). LANDED @ 9024.71', FLOAT COLLAR @ 8979.04', MESA VERDE MARKER @ 6793.34', CROSS OVER JT. @5005.15'. 18:00 - 19:00 1.00 **CSGPRO** 05 D Р 9050 CIRCULATE THROUGH CASING / RIG DOWN KIMZEY **EQUIPMENT** FINAL PSI-530 GPM-340 WT/VIS11.9/32 19:00 - 19:30 0.50 CSGPRO 12 В Р 9050 RIG UP BAKER CEMENT EQUIPMENT 19:30 - 22:30 3.00 Р 9050 **CSGPRO** Ε 12 PRESSURE TEST TO 4900 PSI. PUMP 25 BBLS OF FRESH WATER. PUMP 178 BBLS (505 SX) OF PREMIUM LITE II LEAD CEMENT, 12.5 PPG 1.98 YLD, .05 LB/SACK OF STATIC FREE + .4%BWOC R-3 +.25 LBS/SACK CELLO FLAKE + 5 LBS/SACK KOL-SEAL + .4% BWOC FL-52 + .2%BWOC SODIUM METASILICATE + 6% BWOC BENTONITE + 101 %FRESH WATER . FOLLOWED BY 218 BBLS (1030 SX) OF 14.3# 1.34 YD 5.92 GAL/SK. POZ 50/50 TAIL CEMENT + 2% BWOC BENTONITEII + .005 LB/SACK STATIC FREE + 10% BWOW SODIUM CHLORIDE + .55%BWOC R-3 + .002GPS FP-6L + 58.8% FRESH WATER . SHUT DOWN AND FLUSH LINES. DROP PLUG AND DISPLACE W/ 134 BBLS OF FRESH WATER TREATED WITH CLAYFIX AND MAGNACIDE. FULL RETURNS WITH 20 BBLS OF WATER AND NO CEMENT. LIFT PSI OF 2621 / BUMP PLUG 3236 PSI. . PRESSURE HELD 5 MINS. FLOAT HELD. FLOW BACK 1.5 BBLS. EST. TOC FOR LEAD 100', EST TOC FOR TAIL 3962'. RIG DOWN CEMENTERS. 22:30 Р - 23:30 1.00 **CSGPRO** В 9050 SET PACK OFF TOOL 14

2/20/2014 7:52:42AM 16

23:30 - 0:00

0.50

CSGPRO

14

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9050

NIPPLE DOWN BOP / RELEASE RIG

General

Customer Information 7:

Company	US ROCKIES REGION
Representative	
Address	

Well/Wellbore Information 1.2

					API
			US ROC	US ROCKIES REGION	We:
					11
General					Num
Customer Information					ber:
Company	US ROCKIES REGION				4
Representative					30
Address)4
Well/Wellbore Information	tion				75292
Well	NBU 1022-3C1BS BLUE	Wellbore No.	НО		24(
Well Name	NBU 1022-3C1BS	Wellbore Name	NBU 1022-3C1BS		00
Report No.	1	Report Date	1/20/2014		00
Project	UTAH-UINTAH	Site	NBU 1022-03C PAD)
Rig Name/No.		Event	COMPLETION		
Start Date	1/9/2014	End Date	1/31/2014		
Spud Date	9/20/2013	Active Datum	RKB @5,095.00usft (above Mean Sea Level)		
IWI	NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0				

General ..

Contractor	Job Method	Supervisor	
Perforated Assembly	Conveyed Method		

Summary

1.5

Initial Conditions **4**.

			1				
Fluid Type		Fluid Density		Gross Interval	5,104.0 (usft)-8,908.0 (usft Start Date/Time	Start Date/Time	1/20/2014 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	79	79 End Date/Time	1/20/2014 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	312	312 Net Perforation Interval	104.00 (usft)
Hydrostatic Press		Press Difference		Avg Shot Density	3.00 (shot/ft)	3.00 (shot/ft) Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

Intervals

Perforated Interval 2.1

Misn	_				
Reason			19.00 PRODUCTIO	z	
Charge	Weight	(gram)	19.00		
Charge Desc /Charge	Manufacturer				
Phasing	©		120.00		
Carr	Size	(in)	3.125		
Carr Type /Stage No			EXP/		
Diamete	_	(in)	0.410 EXP/		
Misfires/	Add. Shot				
Shot	Density	(shot/ft)	3.00		
CCL@ CCL-T MD Top MD Base	(nstt)		5,108.0		
MD Top	(nstt)		5,104.0		
CCL-T	တ	(nstt)			
@TOO	(nstt)				
Formation/	Reservoir		20/2014 WASATCH/		
Date			1/20/2014	12:00AM	

OpenWells

Perforated Interval (Continued) 2.1

													J	US ROCKIES REGION	REGION	API We
2.1 Pe	Perforated Interval (Continued)	Continu	(þe													ll Nu
Date	Formation/ Reservoir	(nsft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun	ımber
1/20/2014 12:00AM	WASATCH/			5,206.0	5,210.0	3.00		0.410	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		: 4
1/20/2014 12:00AM	WASATCH/			5,460.0	5,462.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		1304
1/20/2014 12:00AM	WASATCH/			5,649.0	5,652.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		475
1/20/2014 12:00AM	WASATCH/			5,737.0	5,740.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		292
1/20/2014 12:00AM	WASATCH/			6,098.0	6,099.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		400
1/20/2014 12:00AM	WASATCH/			6,163.0	6,164.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		00
1/20/2014 12:00AM	WASATCH/			6,243.0	6,244.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
4	WASATCH/			6,260.0	6,261.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,289.0	6,291.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,339.0	6,341.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,459.0	6,460.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,508.0	6,509.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,584.0	6,585.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,623.0	6,624.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,631.0	6,632.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,643.0	6,644.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,662.0	6,663.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,691.0	6,692.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	WASATCH/			6,772.0	6,774.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			6,832.0	6,834.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			6,842.0	6,844.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		

February 20, 2014 at 7:57 am

Perforated Interval (Continued) 2.1

													ר כ	US ROCKIES REGION	REGION	API We
2.1 Pe	Perforated Interval (Continued)	Continu	(pe													ll Nu
Date	Formation/ Reservoir	(nsft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun	ımber
1/20/2014 12:00AM	MESAVERDE/			6,870.0	6,872.0			0.410	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		: 4
1/20/2014 12:00AM	MESAVERDE/			7,098.0	7,099.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		1304
1/20/2014 12:00AM	MESAVERDE/			7,110.0	7,111.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		475
1/20/2014 12:00AM	MESAVERDE/			7,152.0	7,154.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		292
1/20/2014 12:00AM	MESAVERDE/			7,166.0	7,168.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		400
1/20/2014 12:00AM	MESAVERDE/			7,190.0	7,192.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		00
1/20/2014 12:00AM	MESAVERDE/			7,339.0	7,340.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,389.0	7,390.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,514.0	7,515.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,530.0	7,531.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,562.0	7,564.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,582.0	7,584.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,626.0	7,627.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,687.0	7,688.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,728.0	7,729.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,745.0	7,746.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,758.0	7,760.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,808.0	7,810.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,853.0	7,854.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,887.0	7,888.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		
1/20/2014 12:00AM	MESAVERDE/			7,927.0	7,928.0	3.00		0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N		

Perforated Interval (Continued)

2.1 Perforated Interval (Continued) Date Formation/ CCL@ C Reservoir (usft) (1/20/2014 MESAVERDE/ 12:00AM													_
MES/ SS S	al (Continu	(þe											IV CL
	CCL@	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Misfires/ Density Add. Shot (shot/ft)	Diamete of r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	mber unsign
			7,978.0	7,979.0	3.00	0.410	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,010.0	8,011.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,062.0	8,063.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	175.
			8,074.0	8,075.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	292
			8,087.0	8,088.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	100
			8,113.0	8,114.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,129.0	8,130.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,190.0	8,191.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,203.0	8,204.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,214.0	8,215.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,245.0	8,246.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,254.0	8,256.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,282.0	8,283.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,316.0	8,317.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,335.0	8,336.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
			8,350.0	8,351.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
1/20/2014 MESAVERDE/ 12:00AM			8,359.0	8,360.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO	
1/20/2014 MESAVERDE/ 12:00AM			8,374.0	8,375.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
1/20/2014 MESAVERDE/ 12:00AM			8,423.0	8,424.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	
1/20/2014 MESAVERDE/ 12:00AM			8,442.0	8,443.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO	
1/20/2014 MESAVERDE/ 12:00AM			8,483.0	8,484.0	3.00	0.410 EXP/	EXP/	3.125	120.00		19.00	19.00 PRODUCTIO N	

RECEIVED: Feb. 27, 2014

February 20, 2014 at 7:57 am

Perforated Interval (Continued)

													Sn	US ROCKIES REGION	API Wel
2.1 Pe	Perforated Interval (Continued)	(Continu	(pa												l Nu
Date	Formation/ Reservoir	(nsft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	umber
1/20/2014 12:00AM	MESAVERDE/			8,492.0	8,493.0	3.00		0.410 E	EXP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	: 4
1/20/2014 12:00AM	MESAVERDE/			8,498.0	8,499.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	304
1/20/2014 12:00AM	MESAVERDE/			8,535.0	8,536.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	1752
1/20/2014 12:00AM	MESAVERDE/			8,578.0	8,579.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	292
1/20/2014 12:00AM	MESAVERDE/			8,591.0	8,592.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	400
1/20/2014 12:00AM	MESAVERDE/			8,614.0	8,615.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF N	19.00 PRODUCTIO N	00
1/20/2014 12:00AM	MESAVERDE/			8,643.0	8,644.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF N	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,673.0	8,674.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF N	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,720.0	8,721.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF N	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,803.0	8,804.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF N	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,813.0	8,814.0	3.00		0.410 E	EXP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,845.0	8,846.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF N	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,870.0	8,871.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF N	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,886.0	8,887.0	3.00		0.410 EXP/	:XP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	
1/20/2014 12:00AM	MESAVERDE/			8,907.0	8,908.0	3.00		0.410 EXP/	XP/	3.125	120.00		19.00 PF	19.00 PRODUCTIO N	

Plots

February 20, 2014 at 7:57 am

				U	S ROC	KIES RE	EGION	
				Opera	tion S	Summa	ry Report	
Well: NBU 1022-	3C1BS BLUE						Spud Date: 9/2	20/2013
Project: UTAH-U	INTAH		Site: NBU	1022-03	C PAD			Rig Name No: SWABBCO 10/10
Event: COMPLE	TION		Start Date	e: 1/9/201	4			End Date: 1/31/2014
Active Datum: R Level)	KB @5,095.00usft (al	bove Mean S	ea	UWI: NE	E/NW/0/1	0/S/22/E/3	3/0/0/26/PM/N/81	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/7/2014	-							
1/9/2014	8:00 - 9:00	1.00	SUBSPR	52	В	P		FILL SURFACE CSG. MIRU CAMERON QUICK TEST. PRESSURE TEST CSG & FRAC VALVES 1ST PSI TEST T/ 7000 PSI. HELD FOR 15 MIN LOST -38 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. PRESSURE TEST 8 5/8 X 4 1/2 TO 557 PSI HELD FOR 5 MIN LOST -45 PSI, BLED PSI OFF, REINSTALLED POP OFF SWIFN
								NO PRESSURE ON SURFACE CASING FILLED SURFACE WITH 2 BBL H2O
1/17/2014	9:00 - 10:00	1.00	SUBSPR	37		Р		PERF STG 1)PU 3 1/8 EXP GUN, 19 GM, .40 HOLE SIZE. RIH PERFWELL, AS PER PERF DESIGN. POOH. SWIFW
1/21/2014	6:15 - 6:30	0.25	FRAC	48		Р		HSM,JSA
	6:50 - 9:30	2.67	FRAC	36	Н	Р		71REFER TO STIMULATION PJR FOR FLUID, SAND AND CHEMICAL VOLUMES, ALL STAGES WERE PERFORATED ACCORDING TO PERF RECORD IN OPEN WELLS, ALL STAGES WERE STIMULATED TO VENDOR POST JOB REPORT. ALL PLUGS ARE HALIBURTON 8K CBPS PRESSURE TEST TO 8670 PSI HELD FOR 15 MINUTES LOST 730#
								FRAC STG #1] WHP=1561#, BRK DN PERFS=4540#, @=4.2 BPM, INTIAL ISIP=2350#, FG=., FINAL ISIP=2588#, FG=.73,
								SET PLUG & PERFORATE STG #2
	9:30 - 10:25	0.92	FRAC	46	E	Z		REPLACE GROUND VALVE
	10:28 - 18:00	7.53	FRAC	36	Н	Р		FRAC STG #2] WHP=2306#, BRK DN PERFS=3108#, @=3.7 BPM, INTIAL ISIP=2551#, FG=.74, FINAL ISIP=2750#, FG=.76,
								SET PLUG & PERFORATE STG #3
								FRAC STG #3] WHP=1046#, BRK DN PERFS=2034#, @=3.7 BPM, INTIAL ISIP=1573#, FG=., FINAL ISIP=2700#, FG=.76,
								SET PLUG & PERFORATE STG #4
								FRAC STG #4] WHP=2026#, BRK DN PERFS=3518#, @=4.0 BPM, INTIAL ISIP=2140#, FG=.70, FINAL ISIP=2420#, FG=.73,
								SWIFN W/O WIRELINE

API We	ll Number	: 4304		U	S ROC	KIES RI		
				Opera	ition S	Summa	ary Report	
Well: NBU 1022-			T				Spud Date: 9/2	
Project: UTAH-U	INTAH		Site: NBL	J 1022-03	BC PAD			Rig Name No: SWABBCO 10/10
Event: COMPLE			-	e: 1/9/201				End Date: 1/31/2014
Active Datum: R Level)	KB @5,095.00usft (a	bove Mean Se	ea	UWI: NE	E/NW/0/1	10/S/22/E/	3/0/0/26/PM/N/81	10/W/0/1682/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
1/22/2014	6:30 - 6:45	0.25	FRAC	48		Р		HSM,JSA
	7:00 - 18:00	11.00	FRAC	36	Н	Р		SET PLUG PERFORATE STG #5 FRAC STG #5] WHP=700#, BRK DN PERFS=3491#,
								@=4.8 BPM, INTIAL ISIP=2230#, FG=.72, FINAL ISIP=2350#, FG=.73,
								SET PLUG AND PERFORATE STG #6
								FRAC STG #6] WHP=1472#, BRK DN PERFS=3948#, @=4.5 BPM, INTIAL ISIP=2405#, FG=.75, FINAL ISIP=2415#, FG=.75,
								SET PLUG AND PERFORATE STG #7
								SWIFN W/O FRAC
1/23/2014	6:15 - 6:30	0.25	FRAC	48		Р		HSM,JSA
	6:30 - 17:00	10.50	FRAC	36	Н	Р		FRAC STG #7] WHP=870#, BRK DN PERFS=2675#, @=3.7 BPM, INTIAL ISIP=1790#, FG=.68, FINAL ISIP=2410#, FG=.76,
								SET PLUG AND PERFORATE STG #8
								FRAC STG #8] WHP=971#, BRK DN PERFS=2410#, @=4.0 BPM, INTIAL ISIP=1615#, FG=.66, FINAL ISIP=2145#, FG=.74,
								SET PLUG AND PERFORATE STG #9
								FRAC STG #9] WHP=655#, BRK DN PERFS=2473#, @=4.2 BPM, INTIAL ISIP=1285#, FG=.63, FINAL ISIP=1943#, FG=.72,
								SET PLUG AND PERFORATE STG #10
								SWIFN W/O FRAC
1/24/2014	6:10 - 6:25	0.25	FRAC	48		Р		HSM,JSA

API We	ell Number	• 4304	752924			KIES R	EGION	
				Opera	tion S	Summa	ary Report	
Well: NBU 1022	-3C1BS BLUE						Spud Date: 9/20	0/2013
Project: UTAH-U	JINTAH		Site: NBL	J 1022-03	C PAD			Rig Name No: SWABBCO 10/10
Event: COMPLE	ETION		Start Date	e: 1/9/201	4			End Date: 1/31/2014
Active Datum: R	KB @5,095.00usft (a	bove Mean Se	-			0/S/22/E/	3/0/0/26/PM/N/81	0/W/0/1682/0/0
Level)								1
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:30 - 12:30	6.00	FRAC	36	Н	Р		FRAC STG #10] WHP=448#, BRK DN PERFS=2247#, @=4.2 BPM, INTIAL ISIP=1315#, FG=.64, FINAL ISIP=2016#, FG=.75,
								SET PLUG AND PERFORATE STG #11
								FRAC STG #11] WHP=414#, BRK DN PERFS=2160#, @=2.6 BPM, INTIAL ISIP=1259#, FG=.64, FINAL ISIP=1419#, FG=.67,
								SET PLUG AND PERFORATE STG #12
								FRAC STG #12] WHP=341#, BRK DN PERFS=2025#, @=3.4 BPM, INTIAL ISIP=555#, FG=.54, FINAL ISIP=1050#, FG=.63,
								SET PLUG AND PERFORATE STG #13
								FRAC STG #13] WHP=283#, BRK DN PERFS=592#, @=7.6 BPM, INTIAL ISIP=477#, FG=.53, FINAL ISIP=1145#, FG=.66,
								SET TOP KILL
								TOTAL BBLS=16,072 TOTAL SAND=379,580
1/29/2014	14:00 - 17:00	3.00	DRLOUT			Р		MIRU. NDWH.NUBOP.P/U & RIH W/ 3-7/8" ROCK BIT, POBS, XN & 50JTS 2-3/8" J-55 TBNG. SWIFN.
1/30/2014	7:00 - 7:15	0.25	DRLOUT	30		P P		SAFETY = JSA.
	7:15 - 16:00	8.75	DRLOUT	31		Р		0# ON WELL. CONT RIH W/ TBNG. T/U ON FIRST CBP @5054' W/ 160 JTS MIXED STRING TBNG. R/U POWER SWIVEL. PRESSURE TEST BOP'S GOOD @ 3000#. BREAK CIRC. D/O 7 CBP'S AS FOLLOWS:
								#1 CBP @ 5040'. D/O IN 10MIN W/ 0# DIFFERENTIAL PRESSURE. FCP= 0#. CONT RIH. C/O 15' OF SAND. T/U ON NEXT CBP.
								#2 CBP @ 5240'. D/O IN 11MIN W/ 0# DIFFERENTIAL PRESSURE. FCP= 0#. CONT RIH. C/O 25' OF SAND. T/U ON NEXT CBP.
								#3 CBP @ 5770'. D/O IN 9MIN W/ 100# DIFFERENTIAL PRESSURE. FCP= 0#. CONT RIH. C/O 20' OF SAND. T/U ON NEXT CBP. #4 CBP @ 6371'. D/O IN 11MIN W/ 200# DIFFERENTIAL PRESSURE. FCP= 0#. CONT RIH. C/O
								15' OF SAND. T/U ON NEXT CBP. #5 CBP @ 6722'. D/O IN 10MIN W/ 0# DIFFERENTIAL PRESSURE. FCP= 0#. CONT RIH. C/O 20' OF SAND. T/U ON NEXT CBP.
								#6 CBP @ 6902'. D/O IN 10MIN W/ 0# DIFFERENTIAL PRESSURE. FCP= 0#. CONT RIH. C/O 10' OF SAND. T/U ON NEXT CBP. #7 CBP @ 7222'. D/O IN 9MIN W/ 700#
								DIFFERENTIAL PRESSURE. FCP= 300#. CIRC WELL CLEAN. SWIFN. LOCK OUT RAMS. DRAIN EQUIP. SERVICE RIG. SDFN.

API Well Number: 43047529240000 US ROCKIES REGION **Operation Summary Report** Spud Date: 9/20/2013 Well: NBU 1022-3C1BS BLUE Project: UTAH-UINTAH Site: NBU 1022-03C PAD Rig Name No: SWABBCO 10/10 **Event: COMPLETION** End Date: 1/31/2014 Start Date: 1/9/2014 UWI: NE/NW/0/10/S/22/E/3/0/0/26/PM/N/810/W/0/1682/0/0 Active Datum: RKB @5,095.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) SAFETY = JSA. 1/31/2014 7:00 - 7:15 0.25 **DRLOUT** 48 Ρ 7:15 - 14:00 Р 6.75 DRLOUT 30 SICP= 2200#. SITP= 0#. TURN WELL THRU BJD & HAL 9000'S. R/U PUMP & LINES. BREAK CIRC. D/O REMAINING 6 CBP'S AS FOLLOWS: #8 CBP @ 7614'. D/O IN 9MIN W/ 100# DIFFERENTIAL PRESSURE. FCP= 400#. CONT RIH. C/O 25' OF SAND. T/U ON NEXT CBP. #9 CBP @ 7840'. D/O IN 9MIN W/ 600# DIFFERENTIAL PRESSURE. FCP= 450#. CONT RIH. C/O 10' OF SAND. T/U ON NEXT CBP. #10 CBP @ 8101'. D/O IN 7MIN W/ 800# DIFFERENTIAL PRESSURE. FCP= 450#. CONT RIH. C/O 10' OF SAND. T/U ON NEXT CBP. #11CBP @ 8269. D/O IN 7MIN W/ 700# DIFFERENTIAL PRESSURE. FCP= 550#. CONT RIH. C/O 35' OF SAND. T/U ON NEXT CBP. #12CBP @ 8473'. D/O IN 10MIN W/ 900# DIFFERENTIAL PRESSURE. FCP= 600#. CONT RIH. C/O 45' OF SAND. T/U ON NEXT CBP. #13CBP @ 8657'. D/O IN 7MIN W/ 750# DIFFERENTIAL PRESSURE. FCP= 700#. CONT RIH. SAND. C/O TO PBTD @ C/O 60' OF 8979' W/ TOTAL OF 284JTS OF TBNG. CIRC WELL CLEAN FOR 30MIN. R/D POWER SWIVEL. L/D 17JTS OF TBNG. LAND WELL ON HANGER. NDBOP. NUWH. PRESSURE TEST FLOWLINES GOOD @ 3000#. DROP BALL & PUMP OFF BIT @ 1200# W/ 5BBLS TMAC. TURN WELL OVER TO FLOWBACK CREW. SICP = 2150#, SITP= 1950#. WELL TURNED OVER TO FLOWBACK @ 14:00HRS. RDMO BLUE WELL. TBNG LANDED AS FOLLOWS: KB= 24.00' HANGER = .83' 117JTS 2-3/8" NEW L-80 TBNG = 3708.98' 2-3/8" NEW L-80 PUP JT = 6.02 150JTS 2-3/8" NEW J-55 TBNG = 4711.25' XN / POBS= 2.20' EOT @ 8453.28' TTL FLUID PUMPED= 16702BBLS RIG REC= 1500BBLS TWLTR= 15202BBLS NOTE: D/O THRU BJD.SOLD THRU 2 SEPERATORS AS FOLLOWS: NBU 1022-03CT = 499MMCF NBU1022-3C1BS = 486 MMCF

Anadarko Petroleum Corporation



Project: Uintah Co., UT (UTM) Site: Sec 3-T10S-R22E Well: NBU 1022-3C1BS Wellbore: Original Hole **Final Surveys** Rig: SST 8

Surface Location: SHL 810' FNL & 1682' FWL Sec 3-T10S-R22E

Universal Transverse Mercator (US Survey Feet)
NAD 1927 (NADCON CONUS)
Zone 12N (114 W to 108 W)

Elevation: 5071' GL + 24' KB @ 5095.00ft (SST 8)
ning Easting Latitude

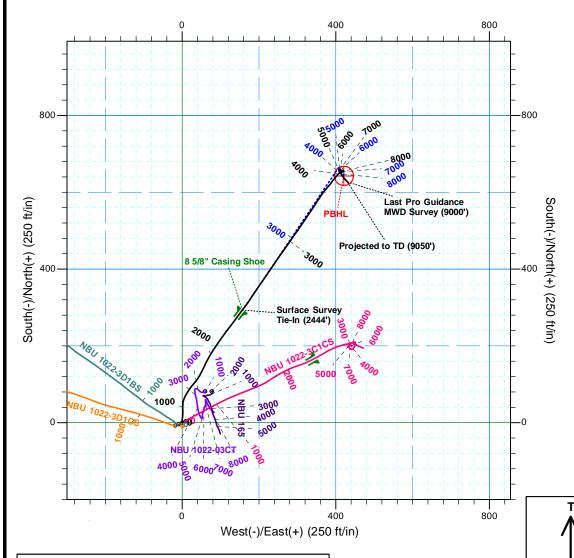
0.00 2080550.79 39.983079 -1

Elevation: Northing 14523790.00 208 Longitude -109.428857

						SECTION Plan			
MD 2444.00 2520.61 2982.16 4386.16 4492.83 9041.46	21.06 21.06 21.06 21.06 0.00 0.32 0.32	Azi 37.11 33.91 33.91 0.00 149.00	TVD 2402.95 2474.44 2905.16 4277.76 4384.43 8933.00	+N/-S 293.42 315.82 453.47 665.21 664.95 643.21	+E/-W 157.05 173.04 265.57 407.92 408.07 421.12	0.00 1.50 0.00 1.50 0.30 0.00	7Face 0.00 -91.49 0.00 180.00 149.00 0.00	VSect 331.52 359.01 524.86 779.98 779.85 768.81	Annotation Survey Tie-In/Begin Turn at 2444' MD, 2403' TVD Begin Hold at 2521' MD, 2474' TVD Begin Drop at 2982' MD, 2905' TVD Begin Build at 4386' MD, 4278' TVD Begin Hold at 4493' MD, 4384' TVD PBHL

		WELLBOR	E TARGET DETA	ILS (LAT/LONG)	
Name PBHL	TVD 8933.00	+N/-S 643.21	+E/-W 421.12	Latitude 39.984845	Longitude -109.427354





Azimuth Corrections

To convert a Magnetic Direction to a True Direction, Add 10.73° East To convert a True Direction to a Grid Direction, Subtract 1.01° To convert a Magnetic Direction to a Grid Direction, Add 9.72°

Date: 16:41, December 04 2013 Created By: Bob Hays

Azimuths to True North

Magnetic North: 10.73°

Magnetic Field Strength: 52087.0snT Dip Angle: 65.80° Date: 11/19/2013 Model: IGRF2010

Anadarko Petroleum Corporation



Project: Uintah Co., UT (UTM) Site: Sec 3-T10S-R22E Well: NBU 1022-3C1BS Wellbore: Original Hole **Final Surveys** Rig: SST 8

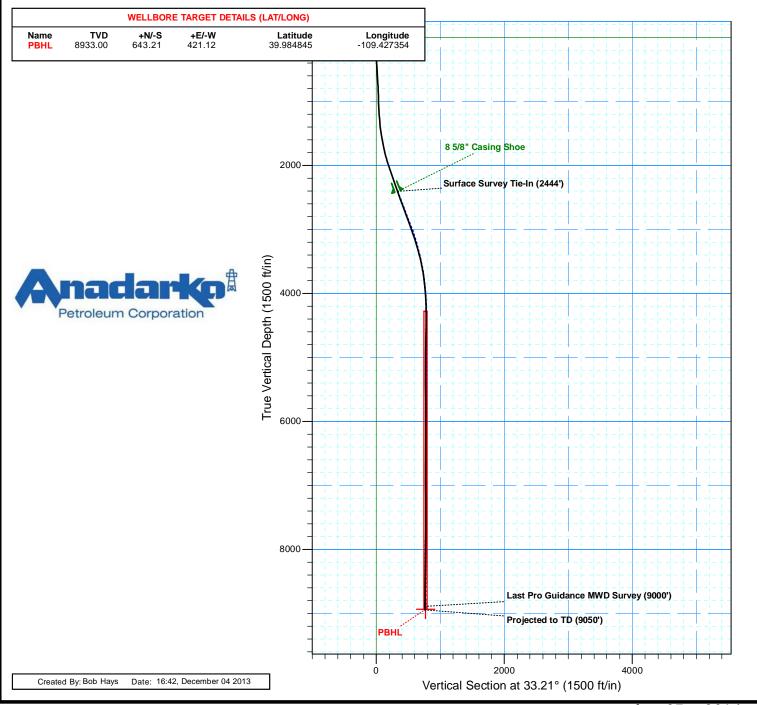
Surface Location: SHL 810' FNL & 1682' FWL Sec 3-T10S-R22E

Universal Transverse Mercator (US Survey Feet)
NAD 1927 (NADCON CONUS)
Zone 12N (114 W to 108 W)
Elevation: 5071 GL + 24 KB @ 5095.00ft (SST 8)

Easting 2080550.79 **Latittude** 39.983079 Northing 14523790.00

Longitude -109.428857

						SECTION Plan			
MD 2444.00	Inc 21.06	Azi 37.11	TVD 2402.95	+N/-S 293.42	+E/-W 157.05	Dleg 0.00	TFace 0.00	VSect 331.52	Annotation Survey Tie-In/Begin Turn at 2444' MD, 2403' TVD
2520.61	21.06	33.91	2474.44	315.82	173.04	1.50	-91.49	359.01	Begin Hold at 2521' MD, 2474' TVD
2982.16	21.06	33.91	2905.16	453.47	265.57	0.00	0.00	524.86	Begin Drop at 2982' MD, 2905' TVD
4386.16	0.00	0.00	4277.76	665.21	407.92	1.50	180.00	779.98	Begin Build at 4386' MD, 4278' TVD
4492.83	0.32	149.00	4384.43	664.95	408.07	0.30	149.00	779.85	Begin Hold at 4493' MD, 4384' TVD
9041.46	0.32	149.00	8933.00	643.21	421.12	0.00	0.00	768.81	PBHL





Anadarko Petroleum Corporation

Uintah Co., UT (UTM) Sec 3-T10S-R22E NBU 1022-3C1BS

Original Hole

Design: Final Surveys

Standard Survey Report

04 December, 2013





Professional Directional LTD

Survey Report



Anadarko Petroleum Corporation Company:

Uintah Co., UT (UTM) Project: Sec 3-T10S-R22E Site: NBU 1022-3C1BS Well: Original Hole Wellbore:

Design:

Local Co-ordinate Reference: TVD Reference:

Well NBU 1022-3C1BS 5071' GL + 24' KB @ 5095.00ft (SST 8) **MD Reference:**

5071' GL + 24' KB @ 5095.00ft (SST 8)

North Reference: **Survey Calculation Method:**

Minimum Curvature Database: EDM 5000.1 Single User Db

Uintah Co., UT (UTM) **Project**

Final Surveys

Universal Transverse Mercator (US Survey Fee System Datum: Map System:

Mean Sea Level

NAD 1927 (NADCON CONUS) Geo Datum: Map Zone: Zone 12N (114 W to 108 W)

Site Sec 3-T10S-R22E

Northing: 14,523,793.82 ft Site Position: Latitude: 39.983089 Lat/Long Easting: From: 2,080,559.97 ft Longitude: -109.428824 Slot Radius: **Position Uncertainty:** 0.00 ft 13.200 in **Grid Convergence:** 1.01°

Well NBU 1022-3C1BS

Well Position +N/-S 0.00 ft Northing: 14,523,790.01 ft Latitude: 39.983079 +E/-W 0.00 ft Easting: 2,080,550.79 ft Longitude: -109.428857 0.00 ft Wellhead Elevation: 0.00 ft Ground Level: 5.071.00 ft **Position Uncertainty**

Original Hole Wellbore

Magnetics Model Name Sample Date Declination **Dip Angle** Field Strength (°) (°) (nT) IGRF2010 11/19/13 10.73 65.80 52,087

Survey Program Date 12/04/13 From То (ft) (ft) Survey (Wellbore) **Tool Name** Description 2,444.00 Surface Surveys (Original Hole) MWD MWD 168.00 2,523.00 9,000.00 Pro Guidance MWD Surveys (Original Hol MWD MWD 9,050.00 9,050.00 Projected to TD (Original Hole) Projection Projection

Survey Measured Vertical Vertical Dogleg Build Turn Depth Depth +N/-S +E/-W Section Rate Rate Rate Inclination Azimuth (ft) (°/100ft) (°/100ft) (°/100ft) (ft) (ft) (ft) (°) (°) (ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 168.00 283.22 168.00 -0.06 0.07 0.11 0.04 -0.160.07 0.00 258.00 357.99 258.00 0.83 -0.27 0.55 1.07 0.98 83.08 0.99 353.00 6.60 352.96 3.38 -0.10 2.78 1.19 2 10 9.06 1 17 447.00 6.26 446.84 6.89 1.51 3.52 7.96 0.42 1.51 -0.36540.00 4.47 10.49 539.62 14.36 1.39 12.78 1.07 1.02 4.55 636.00 4.57 1.34 635.32 21.87 2.16 19.48 0.76 0.10 -9.53 731.00 3.94 359.32 730.06 28.91 2.21 25.40 0.68 -0.66 -2.13825.00 2.46 358.79 823.91 34.16 2.13 29.74 1.57 -1.57-0.56918.00 2.04 347.41 916.84 37.77 1.72 32.54 0.66 -0.45-12.2435.62 359.05 12.38 1,012.00 2.81 1,010.75 41.71 1.32 0.97 0.82 1,104.60 40.15 1,106.00 3.78 1.08 47.11 1.34 1.04 1.03 2.16 4.31 10.30 1,198.36 53.68 2.03 46.03 0.89 0.56 9.81 1,200.00 4.57 21.73 1,293.08 60.71 4.07 53.02 0.97 0.27 12.03 1,295.00 1,388.00 6.01 27.26 1,385.68 68.48 7.67 61.50 1.64 1.55 5.95



Professional Directional LTD

Survey Report



Anadarko Petroleum Corporation Company:

Project: Uintah Co., UT (UTM) Site: Sec 3-T10S-R22E Well: NBU 1022-3C1BS Original Hole Wellbore:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: **Survey Calculation Method:** Well NBU 1022-3C1BS

5071' GL + 24' KB @ 5095.00ft (SST 8) 5071' GL + 24' KB @ 5095.00ft (SST 8)

Minimum Curvature

FDM 5000 1 Single User Db

Design:	sign: Final Surveys			Database:				EDM 5000.1 Single User Db			
Survey											
De	sured epth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
	,481.00	8.05	27.28	1,477.98	78.60	12.89	72.82	2.19	2.19	0.02	
	,576.00	9.58	38.87	1,571.86	90.67	20.90	87.30	2.46	1.61	12.20	
	,670.00	11.34	41.86	1,664.29	103.64	31.97	104.22	1.96	1.87	3.18	
	,762.00	12.84	30.87	1,754.26	119.15	43.26	123.38	2.98	1.63	-11.95	
1,	,855.00	13.82	25.05	1,844.76	138.09	53.26	144.70	1.79	1.05	-6.26	
1,	,950.00	16.97	27.35	1,936.34	160.69	64.44	169.73	3.38	3.32	2.42	
2,	,045.00	18.82	32.10	2,026.75	185.99	78.95	198.85	2.48	1.95	5.00	
2,	,140.00	19.66	35.02	2,116.44	212.05	96.27	230.14	1.34	0.88	3.07	
2,	,234.00	18.99	37.20	2,205.15	237.19	114.59	261.21	1.05	-0.71	2.32	
2,	,328.00	18.99	36.93	2,294.03	261.59	133.03	291.73	0.09	0.00	-0.29	
2,	,420.00	20.80	37.12	2,380.54	286.59	151.88	322.96	1.97	1.97	0.21	
2,	,444.00	21.06	37.11	2,402.95	293.42	157.05	331.52	1.08	1.08	-0.04	
Su	rface Su	ırvey Tie-In (24	144')								
	,523.00	20.20	34.90	2,476.89	315.93	173.42	359.31	1.47	-1.09	-2.80	
-	,587.00	18.80	33.90	2,537.21	333.55	185.49	380.67	2.25	-2.19	-1.56	
	,682.00	19.20	33.90	2,627.04	359.22	202.75	411.60	0.42	0.42	0.00	
2,	,777.00	19.80	34.80	2,716.59	385.40	220.64	443.30	0.71	0.63	0.95	
2,	872.00	20.40	33.80	2,805.80	412.37	239.03	475.94	0.73	0.63	-1.05	
	,967.00	21.00	34.70	2,894.67	440.13	257.94	509.51	0.71	0.63	0.95	
	,063.00	20.60	35.60	2,984.41	468.00	277.56	543.58	0.53	-0.42	0.94	
-	,158.00	19.70	35.00	3,073.60	494.71	296.47	576.29	0.97	-0.95	-0.63	
3,	,253.00	16.40	33.80	3,163.91	518.98	313.12	605.71	3.50	-3.47	-1.26	
3,	,349.00	17.00	34.40	3,255.86	541.82	328.59	633.29	0.65	0.63	0.63	
3,	,444.00	15.20	32.50	3,347.13	563.78	343.13	659.63	1.97	-1.89	-2.00	
3,	,539.00	13.10	33.80	3,439.25	583.23	355.81	682.85	2.24	-2.21	1.37	
	,634.00	12.30	37.60	3,531.92	600.20	367.97	703.71	1.22	-0.84	4.00	
3,	730.00	9.70	41.20	3,626.15	614.39	379.54	721.92	2.80	-2.71	3.75	
	,825.00	7.60	36.80	3,720.07	625.44	388.58	736.11	2.32	-2.21	-4.63	
	,920.00	6.20	38.50	3,814.38	634.49	395.54	747.49	1.49	-1.47	1.79	
	,015.00	5.50	37.30	3,908.88	642.12	401.49	757.14	0.75	-0.74	-1.26	
	,110.00	4.40	45.90	4,003.53	648.28	406.86	765.24	1.39	-1.16	9.05	
4,	,206.00	3.70	48.80	4,099.29	652.88	411.84	771.82	0.76	-0.73	3.02	
4,	,301.00	2.50	61.50	4,194.15	655.89	415.97	776.59	1.45	-1.26	13.37	
4,	,396.00	1.10	98.70	4,289.10	656.74	418.69	778.80	1.85	-1.47	39.16	
4,	,491.00	0.80	161.40	4,384.09	655.98	419.80	778.76	1.07	-0.32	66.00	
	,587.00	0.90	195.50	4,480.08	654.61	419.81	777.63	0.53	0.10	35.52	
4,	,682.00	1.30	270.30	4,575.07	653.90	418.54	776.33	1.45	0.42	78.74	
	,777.00	1.20	250.70	4,670.04	653.58	416.52	774.96	0.46	-0.11	-20.63	
	873.00	1.10	242.10	4,766.02	652.81	414.76	773.36	0.21	-0.10	-8.96	
	,968.00	1.10	237.00	4,861.01	651.89	413.19	771.72	0.10	0.00	-5.37	
-	,063.00	1.20	227.00	4,955.99	650.72	411.70	769.92	0.24	0.11	-10.53	
5.	,158.00	0.50	338.30	5,050.98	650.42	410.81	769.19	1.53	-0.74	117.16	
	,253.00	1.40	348.00	5,145.97	651.94	410.42	770.25	0.96	0.95	10.21	
-	,349.00	1.10	350.10	5,241.94	654.00	410.02	771.75	0.32	-0.31	2.19	
5,	,0-0.00	1.10	550.10	0,241.34	004.00	710.02	111.13	0.52	-0.51	4.10	



Professional Directional LTD

Survey Report



Company: Anadarko Petroleum Corporation

Final Surveys

Project: Uintah Co., UT (UTM)
Site: Sec 3-T10S-R22E
Well: NBU 1022-3C1BS
Wellbore: Original Hole

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well NBU 1022-3C1BS

5071' GL + 24' KB @ 5095.00ft (SST 8) 5071' GL + 24' KB @ 5095.00ft (SST 8)

True

Minimum Curvature

EDM 5000.1 Single User Db

Design:
Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,444.00	0.80	356.80	5,336.93	655.56	409.82	772.95	0.34	-0.32	7.05
5,539.00	0.40	12.90	5,431.92	656.54	409.86	773.79	0.45	-0.42	16.95
5,634.00	0.30	333.60	5,526.92	657.09	409.82	774.23	0.27	-0.11	-41.37
5,729.00	0.20	77.90	5,621.92	657.35	409.88	774.47	0.42	-0.11	109.79
5,825.00	0.40	115.50	5,717.92	657.24	410.34	774.64	0.28	0.21	39.17
5,920.00	0.40	137.30	5,812.92	656.85	410.87	774.60	0.16	0.00	22.95
6,015.00	0.70	142.60	5,907.91	656.15	411.44	774.33	0.32	0.32	5.58
6,110.00	0.10	124.30	6,002.91	655.64	411.86	774.13	0.64	-0.63	-19.26
6,205.00	0.00	100.70	6,097.91	655.59	411.93	774.13	0.11	-0.11	0.00
6,301.00	0.30	153.10	6,193.91	655.37	412.05	774.01	0.31	0.31	0.00
6,396.00	0.30	140.30	6,288.91	654.95	412.32	773.81	0.07	0.00	-13.47
6,491.00	0.70	269.10	6,383.91	654.75	411.90	773.41	0.97	0.42	135.58
6,586.00	0.60	259.50	6,478.90	654.65	410.83	772.74	0.16	-0.11	-10.11
6,682.00	0.70	308.20	6,574.90	654.93	409.87	772.45	0.57	0.10	50.73
6,777.00	0.40	326.10	6,669.89	655.56	409.23	772.63	0.36	-0.32	18.84
6,872.00	0.20	354.70	6,764.89	656.00	409.03	772.88	0.26	-0.21	30.11
6,968.00	0.30	220.50	6,860.89	655.98	408.85	772.77	0.48	0.10	-139.79
7,063.00	0.70	327.30	6,955.89	656.28	408.38	772.76	0.88	0.42	112.42
7,158.00	0.00	100.70	7,050.89	656.76	408.06	772.99	0.74	-0.74	0.00
7,253.00	1.00	2.10	7,145.88	657.59	408.09	773.70	1.05	1.05	0.00
7,348.00	0.40	13.00	7,240.87	658.74	408.20	774.72	0.64	-0.63	11.47
7,443.00	0.40	100.70	7,335.87	659.01	408.60	775.16	0.58	0.00	92.32
7,539.00	0.50	123.60	7,431.87	658.71	409.28	775.29	0.21	0.10	23.85
7,634.00	1.00	144.30	7,526.86	657.81	410.11	774.99	0.59	0.53	21.79
7,729.00	0.40	166.80	7,621.85	656.81	410.67	774.46	0.68	-0.63	23.68
7,824.00	0.50	194.30	7,716.85	656.09	410.64	773.84	0.25	0.11	28.95
7,919.00	0.40	182.00	7,811.85	655.35	410.53	773.16	0.15	-0.11	-12.95
8,015.00	0.80	173.00	7,907.84	654.35	410.60	772.36	0.43	0.42	-9.38
8,110.00	1.10	165.50	8,002.83	652.81	410.90	771.24	0.34	0.32	-7.89
8,205.00	1.60	154.20	8,097.80	650.74	411.71	769.95	0.59	0.53	-11.89
8,301.00	1.70	144.30	8,193.76	648.37	413.12	768.75	0.31	0.10	-10.31
8,396.00	1.80	141.20	8,288.72	646.07	414.88	767.78	0.14	0.11	-3.26
8,491.00	2.30	143.00	8,383.66	643.38	416.96	766.67	0.53	0.53	1.89
8,587.00	2.40	145.70	8,479.58	640.18	419.26	765.25	0.16	0.10	2.81
8,682.00	2.70	139.20	8,574.48	636.85	421.84	763.87	0.44	0.32	-6.84
8,777.00	2.50	136.00	8,669.38	633.66	424.74	762.80	0.26	-0.21	-3.37
8,873.00	2.50	144.70	8,765.29	630.45	427.40	761.57	0.39	0.00	9.06
8,968.00	2.00	135.60	8,860.22	627.57	429.76	760.45	0.65	-0.53	-9.58
9,000.00	2.10	136.20	8,892.20	626.75	430.56	760.20	0.32	0.31	1.88
Last Pro G	uidance MWD								
9,050.00	2.10	136.20	8,942.17	625.43	431.83	759.79	0.00	0.00	0.00



Professional Directional LTD

Survey Report



Anadarko Petroleum Corporation Company:

Project: Uintah Co., UT (UTM) Sec 3-T10S-R22E Site: NBU 1022-3C1BS Well: Wellbore: Original Hole

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference: North Reference: Well NBU 1022-3C1BS

5071' GL + 24' KB @ 5095.00ft (SST 8) 5071' GL + 24' KB @ 5095.00ft (SST 8)

Minimum Curvature

EDM 5000.1 Single User Db

Final Surveys Design:

Database:

Design Anno	tations				
	Measured	Vertical	Local Coo	rdinates	
	Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
	2.444.00	2,402.95	293.42	• •	Surface Survey Tie-In (2444')
	9,000.00	8,892.20	626.75		Last Pro Guidance MWD Survey (9000')
	9,050.00	8,942.17	625.43	431.83	Projected to TD (9050')